Product Name: 748 Date Issued: September 18, 2015

#### **SECTION 1: PRODUCT AND COMPANY IDENTIFICATION**

Product Name: 748 Chemical Synonym / C#: c748
Formula: Multi-component mixture Chemical Family: Detergent blend

Supplier: Chemical Distributors, Inc 80 Metcalf St. Buffalo, NY 14206

Information Telephone: (800)777-CHEM Emergency Telephone: (607)529-3218

## **SECTION 2: HAZARD IDENTIFICATION**

Form: powder Color: White

**Emergency Overview:** Solutions and powders are severe eye irritants, and prolonged or repeated contact may cause skin irritation. Dusts and mists are irritating to the skin, mucous membranes, and upper respiratory tract. Read the entire SDS for a more thorough evaluation of the hazards.

**OSHA Hazard Communication Standard**: This product has been evaluated and classified as defined by OSHA Hazard Communication Standard, 29CFR 1910.1200.

#### **GHS Classification:**

Reproductive toxicity (Category 2)

Eye irritant (Category 2) Acute Oral (Category 5) Signal Word: Warning





GHS Hazard Pictograms :

#### **Hazard Statements:**

H361 Suspected of damaging fertility or the unborn child

H319 Causes serious eye irritation. H303 May be harmful if swallowed.

# Precautionary Statements: P102 Keep out of reach of children.

P202 Do not handle until all safety precautions have been read and understood.

P261 Avoid breathing dust/fume/gas/mist/vapors/spray.

P263 Avoid contact during pregnancy/while nursing.

P264 Wash thoroughly after handling

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

P280 Wear protective gloves/protective clothing/eye protection/face protection

P281 Use personal protective equipment as required.

P308 + P313 If exposed or concerned: Get medical advice/ attention.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing

P301 + P310 IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.

P405 Store locked up.

P321 Specific treatment (If large amounts are swallowed (i.e. more than one teaspoon), give two glasses of water or milk to drink and seek medical attention).

P302 + P352 IF ON SKIN: wash with plenty of soap and water.

P304 + P341 IF INHALED: If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing.

P402 Store in a dry place.

P501 Dispose of contents/ container to an approved waste disposal plant.

#### Other hazards which do not result in classification:

None known. See Section 11 for Potential Health Hazards

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#### SECTION 3: COMPOSITION / INFORMATION ON INGREDIENTS

Hazardous Ingredient(s)	CAS#	% (w/w)
Sodium Tetraborate Decahydrate	1303-96-4	40 - 50

Unlisted components are considered non-hazardous as per 29CFR1910.1200g2C. See section 15 for specific state right-to-know information if applicable.

#### **SECTION 4: FIRST AID MEASURES**

**Eye Contact:** As with any chemical exposure to the eye, flush eyes with water for at least 20-minutes. Seek medical attention.

**Skin Contact:** Wash with soap and water. Seek medical attention.

**Inhalation:** If symptoms such as nose or throat irritation are observed, remove person to fresh air. If not breathing, give artificial respiration. Seek medical attention.

**Ingestion:** If large amounts are swallowed (i.e. more than one teaspoon), give two glasses of water or milk to drink and seek medical attention. Never give anything by mouth to an unconscious person. **Notes to physician:** Observation only is required for adult ingestion of less than 7 grams of borax decahydrate. For ingestion in excess of 7 grams, maintain adequate kidney function and force fluids. Gastric lavage is recommended for symptomatic patients only. Hemodialysis should be reserved for massive acute ingestion or patients with renal failure. Boron analyses of urine or blood are only useful for documenting exposure and should not be used to evaluate severity of poisoning or to guide treatment (see section 11).

## **SECTION 5: FIRE FIGHTING MEASURES**

Extinguishing Media: Use fire extinguishing media suitable for surrounding fires.

**Fire Fighting Procedures:** Firefighters should wear pressure demand, self-contained breathing apparatus and full turn-out gear.

**Unusual Fire and Explosion Hazards:** None – Borax is non-flammable, combustible or explosive. The product is itself a flame retardant.

# **SECTION 6: ACCIDENTAL RELEASE MEASURES**

**Personal precautions:** Avoid dust formation. In case of exposure to prolonged or high level of airborne dust, wear a personal respirator in compliance with national legislation.

**Environmental precautions:** Borax decahydrate is a water-soluble white powder that may, at high concentrations cause damage to trees or vegetation by root absorption (see section 12).

#### Steps to be taken in case material is released or spilled:

**Land spill:** Vacuum, shovel or sweep up borax and place in containers for disposal in accordance with applicable local regulations. Avoid contamination of water bodies during clean up and disposal. No personal protective equipment is needed to clean up land spills.

**Spillage into water:** Where possible, remove any intact containers from the water. Advise local water authority that none of the affected water should be used for irrigation or for the abstraction of potable water until natural dilution returns the boron value to its normal environmental background level (see sections 12, 13 and 15).

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# **SECTION 7: HANDLING AND STORAGE**

**Handling:** To maintain package integrity and to minimize caking of the product, bags should be handled on a first-in first out basis. Good housekeeping and dust prevention procedures should be followed to minimize dust generation and accumulation. Your supplier can advise you on safe handling, please contact the supplier. The product should be kept away from strong

reducing agents. Apply above handling advice when mixing with other substances.

**Storage Requirements:** Keep containers closed and store indoors in a dry well ventilated location. Provide appropriate ventilation and store bags such as to prevent any accidental damage.

# **SECTION 8: EXPOSURE CONTROLS / PERSONAL PROTECTION**

Hazardous Ingredient	ACGIH TLV (mg/m3) TWA	ACGIH TLV (mg/m3) STEL
Sodium Tetraborate Decahydrate	5	-

Engineering measures: Maintain air concentrations below occupational exposure standards.

Ventilation / Local Exhaust / Mechanical Recommendations: Use local exhaust ventilation to keep airborne concentrations of borax decahydrate dust below permissible exposure levels. Wash hands before breaks and at the end of the workday. Remove and wash soiled clothing.

# Personal protective equipment:

**Respiratory Protection:** Where risk assessment shows air-purifying respirators are appropriate use a full-face particle respirator type N100 (US) or type P3 (EN 143) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

**Skin Protection:** Vinyl or rubber protective gloves.

Eye Protection: Goggles or face shield.

Other Protective Equipment: Vinyl apron (optional).

# **SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES**

**Appearance / Odor:** White granular powder, odor nil.

Water Solubility: Complete pH (1%): 9 - 10

Specific Gravity: N/A Boiling Point (°F): N/A

Evaporation Rate(water=1): N/A % Volatile: N/A

Vapor Density(air=1): N/A Vapor Pressure(mmHg): N/A Flash Point: N/A Flash Point Method Used: N/A

Flammable Limits: LEL = N/A UEL = N/A

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#### SECTION 10 : STABILITY AND REACTIVITY

#### **Hazardous Decomposition Products:**

**Chemical Stability:** Borax decahydrate is stable under normal ambient and anticipated storage and handling conditions of temperature and pressure. When heated it losses water, eventually forming anhydrous borax (Na2 B4 O7).

**Conditions to Avoid:** Exposure to moisture and incompatible materials.

**Incompatibility with other Substances:** Avoid contact with strong reducing agents such as metal hydrides, acetic anhydride or alkali metals. Reaction with strong reducing agents such as metal hydrides, acetic anhydride or alkali metals will generate flammable hydrogen gas which could create an explosive hazard.

Hazardous decomposition products: Boranes, hydrogen, boron oxides.

# **SECTION 11: TOXICOLOGICAL INFORMATION**

# Potential health effects (as Sodium Tetraborate Decahydrate):

Inhalation is the most significant route of exposure in occupational and other settings. Dermal exposure is not usually a concern because borax decahydrate is poorly absorbed through intact skin.

**Inhalation:** Occasional mild irritation effects to nose and throat may occur from inhalation of borax decahydrate dusts at levels higher than 10 mg/m<sub>3</sub>.

**Eye contact**: Borax decahydrate is a serious eye irritant.

**Skin contact** Borax decahydrate does not cause irritation to intact skin.

**Ingestion**: Products containing borax decahydrate are not intended for ingestion. Borax decahydrate has low acute toxicity. Small amounts (e.g. a teaspoonful) swallowed accidentally are not likely to cause effects; swallowing amounts larger than that may cause gastrointestinal symptoms.

**Reproductive/Developmental**: Animal ingestion studies in several species, at high doses, indicate that borates cause reproductive and developmental effects. A human study of occupational exposure to borate dust showed no adverse effect on reproduction. A recent epidemiological study and a peer reviewing report of the past epidemiological studies conducted in China didn't show any negative effect of boron on human fertility.

**Potential ecological effects**: Large amounts of borax decahydrate can be harmful to plants and other species. Therefore releases to the environment should be minimized.

**Signs and symptoms of exposure :** Symptoms of accidental over-exposure to borax decahydrate have been associated with ingestion or absorption through large areas of damaged skin. These may include nausea, vomiting, and diarrhea, with delayed effects of skin redness and peeling.

#### **Toxicological Data (as Sodium Tetraborate Decahydrate):**

Acute toxicity: Low acute oral toxicity; LD50 in rats is 6,000 mg/kg of body weight.

**Skin corrosion / irritation** Low acute dermal toxicity; LD<sub>50</sub> in rabbits is greater than 2,000 mg/kg of body weight. Borax decahydrate is poorly absorbed through intact skin. Non-irritant.

**Serious eye damage/irritation :** Borax decahydrate is a serious eye irritant.

**Respiratory or skin sensitization:** Borax is not a skin sensitizer.

Germ cell mutagenicity / carcinogenicity : This product does not contain any materials considered to be carcinogenous according to OSHA, NTP, IARC, or ACGIH.

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# Toxicological Data (as Sodium Tetraborate Decahydrate), continued :

**Reproductive toxicity:** Animal feeding studies in rat, mouse and dog, at high doses, have demonstrated effects on fertility and testes (2). Studies with chemically related boric acid in rat, mouse and rabbit, at high doses, demonstrate developmental effects on the fetus including fetal weight loss and minor skeletal variations. The doses administered were many times in excess of those

which humans would normally be exposed to. Human epidemiological studies show no increase in pulmonary disease in occupational populations with chronic exposures to boric acid dust and sodium borate dust. A recent epidemiology study under the conditions of normal occupational exposure to borate dusts indicated no effect on fertility.

STOT-single exposure N.A. STOT-repeated exposure N.A.

Aspiration hazard: Low acute inhalation toxicity; LC50 in rats is greater than 2.0 mg/l (or g/m3).

# **SECTION 12: ECOLOGICAL INFORMATION**

**Phytotoxicity:** Boron is an essential micronutrient for healthy growth of plants; however, it can be harmful to boron sensitive plants in higher quantities. Care should be taken to minimize the amount of borate product released to the environment.

Algal toxicity: Green algae, Pseudokirchneriella subcapitata (Hansveit and Oldersma, 2000)

72-hr EC50 –biomass = 40 mg B/L, or 229 mg boric acid/L.

Invertebrate toxicity: Daphnia, Daphnids, Daphnia magna (Gersich, 1984a)

48-hr LC50 = 133 mg B/L or 760 mg boric acid/L or 619 mg disodium tetraborate , anhydrous/L

Fish toxicity: Fish, Fathered minnow, Pimephales promelas (Soucek et al., 2010)

96-hr LC50 = 79.7 mg B/L or 456 mg boric acid/L or 370 mg disodium tetraborate, anhydrous

**Persistence and degradability**: Boron is naturally occurring and ubiquitous in the environment. Borax is a naturally occurring borate.

**Bio-accumulative potential**: Not significantly bio-accumulative.

**Mobility in soil**: The product is soluble in water and is leachable through normal soil.

Results of PBT and vPvB assessment No data available

Other adverse effects No data available

# **SECTION 13: DISPOSAL CONSIDERATIONS**

**Waste Disposal Method:** Recycle, recovery and reuse of materials, where permitted, is encouraged as an alternate to disposal as a waste. Hazardous waste classification under federal regulations (40 CFR Part 261 et seq) is dependent upon whether a material is a RCRA listed hazardous waste or has any of the four RCRA hazardous waste characteristics. Refer to 40 CFR Part 261.33 to determine if a given material to be disposed of is a RCRA listed hazardous waste. RCRA Hazardous Waste Characteristics: There are four characteristics defined in 40 CFR Section 261.21-61.24: *Ignitability, Corrosivity, Reactivity, and Toxicity.* To determine Ignitability, see Section 9 of this SDS (flash point). For Corrosivity, see Sections 9 and 14 (pH and DOT corrosivity). For Reactivity, see Section 10 (incompatible materials). For Toxicity, see Section 2 (composition). Federal regulations are subject to change. State and local requirements, which may differ from or be more stringent than the federal regulations, may also apply to the classification of the material if it is to be disposed.

Is the unused product a RCRA hazardous waste (40CFR261.33) if discarded? No If yes, the RCRA ID number is : N/A

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#### **SECTION 14: TRANSPORTATION INFORMATION**

**Transportation Emergency Telephone Number:** 3E 24 hour number: (866)302-6855\* \*Please refer to c# referenced in section 1 of this sds.

UN Number / DOT Proper Shipping Name / DOT Hazard Class /Packing Group / DOT Label & other information: NOT REGULATED BY DOT (mildly alkaline compound cleaning powder NOIBN)

# **SECTION 15: REGULATORY INFORMATION**

## **US FEDERAL REGULATIONS:**

**TSCA** (**Toxic Substances Control Act**) **Status**: The intentional ingredients of this product are listed.

#### CERCLA RQ - 40 CFR 302.4(a):

Component RQ (lbs)

None

Spills or releases resulting in the loss of any ingredient at or above its RQ requires immediate notification to the National Response Center (800) 424-8802 and to your Local Emergency Planning Committee.

# SARA 302 Components - 40 CFR 355 Appendix A Section 302 Component(s) TPQ (lbs) RQ (lbs) None

None

# SARA 311/312 Classification - 40 CFR 370.2 :

Chronic Health Hazard (as Sodium Tetraborate Decahydrate)

#### **SARA 313 Components - 40 CFR 372.65:**

Section 313 Component(s) CAS # %

None

#### **INTERNATIONAL REGULATIONS:**

Sodium Tetraborate Decahydrate (CAS#1303-96-4) is listed on the following inventories: Canadian DSL, ECN, South Korea, Japanese MITI.

#### **EU Reach Regulation**

Disodium tetraborates are listed in the Candidate List of Substances of Very High Concern "SVHC" for eventual inclusion in Annex XIV to REACH Regulation 1907/2006 ("Authorization List") (18.06.2010-ED/30/2010).

Disodium tetraborates are listed in the Annex XVII of REACH Regulation 1907/2006 (EU No. 109/2012) and its use in consumer products above specific concentration limits is restricted. Note that this restriction is only specific to consumer products and do not cover its industrial and/or professional applications. Disodium Tetraborates can be used in consumer products below specific concentration limits (which is C ≥8.5% for Borax decahydrate).

Clean Air Act (Montreal Protocol): Borax decahydrate was not manufactured with and does not contain any Class I or Class II ozone depleting substances.

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## **STATE REGULATIONS:**

California Safe Drinking Water Act (Prop. 65) Listing: This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

# Other Regulations / Legislation which apply to this product:

Sodium Tetraborate Decahydrate (CAS#1303-96-4) is listed on the following inventories: Massachusetts Right to Know, Pennsylvania Right to Know, New Jersey Right To Know

# **SECTION 16: OTHER INFORMATION**

NFPA Rating: HEALTH: 2 FLAMMABILITY: 0 REACTIVITY: 0

NFPA hazard degree designation 704: 4 = extreme, 3 = high, 2 = moderate, 1 = slight, 0 = none.

**Revision Date:** 7/27/2015

Information and data compiled to compose this SDS is correct to the best of our knowledge as of the printed date, and is offered solely for your consideration, investigation, and verification.