Boric Acid

SAFETY DATA SHEET

EFFECTIVE DATE: January 1, 2015

SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: **Boric acid**
CHEMICAL NAME/SYNONYM: **Orthoboric acid, Boracic acid**

MANUFACTURER: **Altair Partners LP**
ADDRESS: **343 Millburn Avenue, Suite 201**
Millburn, NJ 07041

EMERGENCY PHONE: **(973) 564-6400**
CHEMTREC PHONE: **(800) 424-9300**

RECOMMENDED USE: **Industrial manufacturing**

SECTION 2: HAZARDS IDENTIFICATION

HAZARD CLASSIFICATION: Reproductive Toxicity Category 2

HAZARD PICTOGRAM:

SIGNAL WORD: WARNING

HAZARD STATEMENTS:
H361: Suspected of damaging fertility or the unborn child.

PRECAUTIONARY STATEMENTS:
P202: Do not handle until all safety precautions have been read and understood.
P281: Use personal protective equipment as required.
P308+P313: IF exposed or concerned: Get medical advice/attention.
P501: Dispose of contents/container in accordance with local regulation.

OTHER HAZARDS WHICH DO NOT RESULT IN CLASSIFICATION: None.

SECTION 3: COMPOSITION / INFORMATION ON INGREDIENTS

INGREDIENT	CAS NO.	% WT	SARA 313 REPORTABLE
Boric acid	**10043-35-3**	**>99.9%**	**No**

SECTION 4: FIRST AID MEASURES

EYES: Use eye wash fountain or fresh water to cleanse eye. If irritation persists for more than 30 minutes, seek medical attention.

SKIN: No treatment necessary.

INGESTION: Products containing boric acid are not intended for ingestion. Small amounts (e.g., a teaspoonful) swallowed accidentally are not likely to cause effects; swallowing larger amounts may cause gastrointestinal symptoms. If larger amounts are swallowed, give two glasses of water to drink and seek medical attention.

INHALATION: If symptoms such as nose or throat irritation are observed, remove to fresh air.

NOTES TO PHYSICIANS OR FIRST AID PROVIDERS: Only observation is required for adult ingestion of less than a few grams of the product. For ingestion of larger amounts, maintain fluid and electrolyte balance and maintain adequate kidney function. Gastric lavage is only recommended for heavily exposed, symptomatic patients in whom emesis has not emptied the stomach. Hemodialysis should be reserved for patients with massive acute absorption, especially for patients with compromised renal function. Boron analyses of urine or blood are only useful for verifying exposure and are not useful for evaluating severity of poisoning or as a guide in treatment.

SECTION 5: FIRE-FIGHTING MEASURES

EXTINGUISHING MEDIA: Use extinguishing media that are appropriate to local circumstances and the surrounding environment.

SPECIAL FIRE FIGHTING PROCEDURES: Not applicable. Boric acid is itself a flame retardant.

UNUSUAL FIRE AND EXPLOSION HAZARDS: None. Boric acid is not flammable, combustible or explosive.

SECTION 5 NOTES: Boric acid is not flammable, combustible, or explosive. Boric acid itself is a flame retardant.

SECTION 6: ACCIDENTAL RELEASE MEASURES

General: Boric acid is a water-soluble white powder that may cause damage to trees or vegetation by root absorption.

Land Spill: Vacuum, shovel, or sweep up boric acid 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.

Water Spill: 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 or meets local water quality standards.

SECTION 7: HANDLING AND STORAGE

PRECAUTIONS FOR SAFE HANDLING: Good housekeeping procedures should be followed to minimize dust generation and accumulation. Avoid spills. Do not eat, drink and smoke in work areas. Wash hands after use. Remove contaminated clothing and protective equipment before entering eating areas.

CONDITIONS FOR SAFE STORAGE, INCLUDING ANY INCOMPATIBILITIES: No special handling precautions are required, but dry, indoor storage is recommended. To maintain package integrity and to minimize caking of the product, bags should be handled on a "first-in first-out" basis.

Storage temperature:	Ambient
Storage pressure:	Atmospheric
Special sensitivity:	Moisture (Caking)

SECTION 8: EXPOSURE CONTROLS / PERSONAL PROTECTION

OSHA PEL-TWA: 15 mg/m^3 total boric acid dust and 5 mg/m^3 respirable dust

ACGIH TLV-TWA-OEL: 2 mg/m^3 inhalable boric acid particles

ACGIH 15 min STEL: 6 mg/m^3 inhalable boric acid particles

CalOSHA PEL-TWA: 5 mg/m^3 total boric acid dust

ENGINEERING CONTROLS AND VENTILATION: Use local exhaust ventilation to keep airborne concentrations of boric acid dust below permissible exposure limits.

RESPIRATORY PROTECTION: Where airborne concentrations are expected to exceed exposure limits, NIOSH/MSHA certified respirators must be used.

EYE PROTECTION: Eye goggles are not required for normal industrial exposures, but eye protection according to ANSI Z.87.1 or other national standards may be warranted if environment is excessively dusty.

SKIN PROTECTION: Gloves are not required for normal industrial exposures, but standard work gloves (cotton, canvas or leather) may be warranted if environment is excessively dusty..

SECTION 8 NOTES: Boric acid is listed/regulated by OSHA, Cal OSHA, and ACGIH as “Particulate Not Otherwise Classified” or “Nuisance Dust.” PEL: Permissable Exposure Limit, TLV: Threshold Limit Value, TWA: Time Weighted Average, STEL: Short-Term Exposure Limit, OEL: Occupational Exposure Limit.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE: White, crystalline powder

ODOR: Odorless

ODOR THRESHOLD: Not applicable

pH AS SUPPLIED: 6.1 (0.1% solution); 5.1 (1.0% solution); 3.7 (4.7% solution) @ 20°C

MELTING POINT/ FREEZING POINT: 171°C

BOILING POINT AND BOILING RANGE: Not applicable: melting point 815°C

FLASH POINT: Not applicable: inorganic substance

EVAPORATION RATE: not applicable: non-volatile

FLAMMABILITY: Non-flammable: used as a flame retardant

UPPER/LOWER FLAMMABILITY OR EXPLOSIVE LIMITS: Not applicable: non-flammable

VAPOR PRESSURE: Not applicable: melting point 815°C

VAPOR DENSITY: Not applicable: melting point 815°C

RELATIVE DENSITY: 1.49 @ 23°C

SOLUBILITY IN WATER: Yes (49.2 g/L at 20°C)

PARTITION COEFFICIENT; n-octanol/water: Log P_{ow} = -1.09 at 22°C

AUTO-IGNITION TEMPERATURE: Not applicable: not self-heating

DECOMPOSITION TEMPERATURE: If heated above 100°C water is lost and boric acid converts initially to metaboric acid (HBO_2) and on further heating forms boric oxide (B_2O_3)

VISCOSITY: Not applicable: solid substance

EXPLOSIVE PROPERTIES: Not explosive: does not contain chemical groups associated with explosive properties

OXIDISING PROPERTIES: Not oxidizing: does not contain chemical groups associated with oxidizing properties

MOLECULAR WEIGHT: 61.8

Section 9 Notes: Chemical formula: H_3BO_3

SECTION 10: STABILITY AND REACTIVITY

REACTIVITY: None known.

STABILITY: Under normal ambient temperatures (-40 °C to +40°C), boric acid is stable. When heated it loses water, first forming metaboric acid (HBO_2), and on further heating it is converted into boric oxide (B_2O_3).

OTHER: Boric acid is a weak acid that may cause corrosion of base metals. Reaction with strong reducing agents such as metal hydrides or alkali metals will generate hydrogen gas which could create an explosive hazard. Avoid contact with strong reducing agents by storing according to good industrial practice.

HAZARDOUS DECOMPOSITION OR BY-PRODUCTS: None.

SECTION 11: TOXICOLOGICAL INFORMATION

ROUTES OF EXPOSURE: Inhalation is the most significant route of exposure in occupational and other settings. Dermal exposure is not usually a concern because boric acid is poorly absorbed through intact skin. Boric acid is not intended for ingestion.

SYMPTOMS RELATED TO THE PHYSICAL, AND CHEMICAL AND TOXICOLOGICAL CHARACTERISTICS: Boric acid is *not* intended for ingestion. Small amounts (e.g. a teaspoonful) swallowed accidentally are not likely to cause effects. Symptoms of accidental over-exposure to high doses of inorganic borate salts have been associated with ingestion or absorption through large areas of severely damaged skin. These may include nausea, vomiting, and diarrhoea, with delayed effects of skin redness and peeling.

DELAYED AND IMMEDIATE EFFECTS AS WELL AS CHRONIC EFFECTS FROM SHORT AND LONG-TERM EXPOSURE: Human epidemiological studies show no increase in pulmonary disease in occupational populations with chronic exposures to boric acid and sodium borate dust. Human epidemiological studies indicate no effect on fertility in occupational populations with chronic exposures to borate dust and indicate no effect to a general population with high exposures to borates in the environment.

ACUTE TOXICITY:

Method: Acute Oral Toxicity Study – OECD Guideline 401
Species: Rat
Dose: 2000 – 5000 mg/kg body weight
Routes of Exposure: Oral
Results: Low acute oral toxicity. The oral LD_{50} value in male rats is 3,450 mg/kg bw, and in female rats is 4080 mg/kg bw.
Classification: Acute Toxicity (Oral) Category 5 (Hazard statement: H303: May be harmful if swallowed)

Method: Acute Dermal Toxicity Study – U.S. EPA FIFRA Guidelines
Species: Rabbit
Dose: 2,000 mg/kg bw
Routes of Exposure: Dermal
Results: Low acute dermal toxicity; LD_{50} in rabbits is > 2,000 mg/kg of body weight. Poorly absorbed through intact skin.
Based on the available data, the classification criteria are not met.

Method: Acute Inhalation Toxicity Study – OECD Guideline 403
Species: Rat
Dose: 2.12 mg/L
Routes of Exposure: Inhalation
Results: Low acute inhalation toxicity; LC_{50} in rats is > 2.0 mg/l (or g/m^3). Based on the available data, the classification criteria are not met.

SKIN CORROSION / IRRITATION:

Method: Primary Dermal Irritation Study – U.S. EPA FIFRA Guidelines
Species: New Zealand White Rabbit
Dose: 0.5 g moistened with saline
Routes of Exposure: Dermal
Results: No skin irritation. Mean Primary Irritation Score: 0.1. Based on the available data, the classification criteria are not met.

SERIOUS EYE DAMAGE / IRRITATION:

Method: Eye Irritation Study – similar to OECD Guideline 405
Species: New Zealand White Rabbit
Dose: 0.1 g
Routes of Exposure: Eye
Results: Not irritating, corneal involvement or irritation clearing in 7 days.
Classification: Based on mean scores < 1, and the effects were fully reversible within 7 days, the classification criteria are not met. Many years of occupational exposure indicate no adverse effects on human eye.

RESPIRATORY OR SKIN SENSITISATION:

Method: Buehler Test – OECD Guideline 406
Species: Guinea Pig
Dose: 0.4 g 95 % w/w/boric acid
Routes of Exposure: Dermal
Results: Not a skin sensitiser. No respiratory sensitisation studies have been conducted. There are no data to suggest that boric acid is a respiratory sensitiser. Based on the available data, the classification criteria are not met.

GERM CELL MUTAGENICITY:

Method: Several in vitro mutagenicity studies have been carried out on boric acid including gene mutation in mammalian cells, unscheduled DNA synthesis, chromosomal aberration and sister chromatid exchange in mammalian cells.
Species: L5178Y mouse lymphoma, V79 Chinese hamster cells, C3H/10T1/2 cells, hepatocytes, Chinese hamster ovary (CHO cells).
Dose: 1.0 - 10.0 mg/ml (1000 -10000 ppm) boric acid
Routes of Exposure: *in vitro*
Results: Not mutagenic (based on boric acid). Based on the available data, the classification criteria are not met.

CARCINOGENICITY:

Method: OECD 451 equivalent.
Species: B6C3F1 mice
Dose: 446 ; 1150 mg boric acid/kg bw/day
Routes of Exposure: Oral feeding study
Results: No evidence of carcinogenicity. Based on the available data, the classification criteria are not met.

REPRODUCTIVE TOXICITY:

Method: Three-generation feeding study, similar to OECD 416 Two-Generation Study
Species: Rat
Dose: 0; 34 (5.9); 100 (17.5) and 336 (58.5) mg boric acid (mg B)/kg bw/day
Routes of Exposure: Oral feeding study
Results: NOAEL in rats for effects on fertility in males is 100 mg boric acid/kg bw equivalent to 17.5 mg B/kg bw.

Method: Prenatal Developmental Toxicity Study of Boric Acid – OECD Guideline 414
Species: Rat
Dose: 0; 19 (3.3); 36 (6.3); 55 (9.6); 76 (13.3) and 143 (25) mg boric acid (mg B)/kg bw.
Routes of Exposure: Oral feeding study

Results: NOAEL in rats for developmental effects on the foetus including foetal weight loss and minor skeletal variations is 55 mg boric acid/kg bw or 9.6 mg B/kg.
Classification: Reproductive Toxicity Category 2 (Hazard statement: H361: Suspected of damaging fertility or the unborn child.)

Method: Occupational studies of evaluating sensitive sperm parameters in highly exposed borate workers. Epidemiological studies evaluating high environmental exposures to boron and developmental effects in humans have been conducted.
Species: Human
Dose: A subset of workers was exposed to 125 mg B/day.
Routes of Exposure: Combined oral ingestion and inhalation
Results: No adverse fertility effects in male workers. Epidemiological studies of human developmental effects have shown an absence of effects in exposed borate workers and populations living in areas with high environmental levels of boron.

STOT-SINGLE EXPOSURE:

Method: Standard Test Method for Estimating Sensory Irritancy of Airborne Chemicals – ASTM E981-04 (2004)
Species: Mouse
Dose: 221 - 1096 mg boric acid/m^3
Routes of Exposure: Inhalation
Results: The highest concentration of boric acid that was achievable with acceptable control of the aerosol concentration was 1096 mg/m3 with a %RD of 19%. The lowest exposure tested of 221 mg/m^3 boric acid resulted in a reduced respiration rate of 9%, graded as no irritation. Based on the available data, the classification criteria are not met.

Method: Sensory irritation in human volunteers
Species: Human
Dose: 2.5, 5, 10 mg boric acid/m^3
Routes of Exposure: Inhalation
Results: No irritation from boric acid was observed at exposures up to 10 mg/m3 among male and female human volunteers under controlled laboratory conditions.

STOT-REPEATED EXPOSURE:

Method: Chronic toxicity study of boric acid, similar to OECD 452
Species: Rat
Dose: 0; 33 (5.9); 100 (17.5); 334 (58.5) mg boric acid (B)/kg bw per day (nominal in diet)
Routes of Exposure: oral: feed
Results: A NOAEL of 17.5 mg B/kg bw/day equivalent to 100 mg boric acid/kg bw/day was determined in a chronic feeding study (2 years) in rats and is based on testes effects. Other effects (kidney, haemopoietic system) are regarded only at even higher dose levels. Based on the available data, the classification criteria are not met.

ASPIRATION HAZARD: Physical form of solid powder indicates no aspiration hazard potential.

SECTION 12: ECOLOGICAL INFORMATION

ECOTOXICITY (AQUATIC AND TERRESTRIAL, WHERE AVAILABLE):
Note that the data values are expressed as boron equivalents. To convert to this product divide the boron equivalent by 0.175. Studies judged to be unreliable or with insufficient information to evaluate are not included.

FRESHWATER:
Chronic studies

Taxonomic Group	Number of Taxa Tested	Range of Endpoint Values (geometric NOEC/EC10)	References
Algal	4	10 mg B/L (*Chlorella pyrenoidosa*) to 50 mg B/L (*Anacystis nidulans*)	3, 4
Higher plants	3	4.0 mg B/L (*Phragmites australis*) to 60 mg B/L (*Lemna minor*)	5, 6
Invertebrate and protozoan	7	5.7 mg B/L (*Daphnia magna*) to 32 mg B/L (*Chironomus riparius*)	7, 8
Fish	6	2.9 mg B/L (*Micropterus salmoides*) to 17 mg B/L (*Carassius auratus*)	9
Amphibian	2	29 mg B/L (*Rana pipiens*) to 41 mg B/L (*Bufo fowleri*)	9

Results[2]: Based on the complete data set of 22 species, the HC_5 value of the species sensitivity distribution is 4.05 mg B/L.

Acute studies

Taxonomic Group	Number of Taxa Tested	Range of Endpoint Values (geometric EC/LC50)	References
Algal	2	10 mg B/L (*Chlorella pyrenoidosa*) to 28 mg B/L (*Selenastrum capricornutum*)	3, 10
Invertebrate and protozoan	9	113 mg B/L (*Ceriodaphnia dubia*) to 1376 mg B/L (*Chironomus decorus*)	11, 12
Fish	7	80 mg B/L (*Pimephales promelas*) to 627 mg B/L (*Onchorhynchus tschawytscha*)	11, 13
Amphibian	2	86 mg B/L (*Rana pipiens*) to 104 mg B/L (*Bufo fowleri*)	9

Results[2]: Based on the complete data set from 46 studies with 20 species, the HC_5 value of the species sensitivity distribution is 27.3 mg B/L

Classification: Based on the acute data for freshwater species, this substance is not classified as hazardous to the environment.

MARINE AND ESTUARINE DATA:
Chronic studies

Taxonomic Group	Number of Taxa Tested	Range of Endpoint Values (geometric NOEC/EC10)	References
Algal	19	5 mg B/L (*Emiliana huxleyi*) to >100 mg B/L (*Agmenellum quadruplicatum, Anacystis marina, Thallassiorsira pseudonana*)	4

Results: No data are available for invertebrate or vertebrate species. The results from the freshwater data set are recommended as applicable to marine and estuarine species.

Acute studies

Taxonomic Group	Number of Taxa Tested	Range of Endpoint Values (geometric EC/LC50)	References
Invertebrate	3	45 mg B/L (*Litopenaeus vannamei*) to 83 mg B/L (*Americamysis bahia*)	14, 15
Fish	2	74 mg B/L (*Limanda limanda*) to 600 mg B/L (*Oncorhynchus tschawytscha*)	13, 16

No data are available for algal species.

SEDIMENT:

Taxonomic Group	Number of Taxa Tested	Range of Endpoint Values (geometric EC/LC50)	References
Invertebrate	1	82.4 mg B/kg sediment dw (*Chironomus riparius*)	17, 18

Results: Although limited, the data suggest that sediment organisms are within range of toxicity of aquatic organisms. In addition, the substance will not partition to the sediment, so a sediment/water partitioning approach is justified.

SEWAGE TREATMENT PLANTS (STP):

Taxonomic Group	Number of Taxa Tested	Range of Endpoint Values (geometric NOEC/EC10)	References
Activated sludge	NA	>17.5 mg B/L to 100 mg B/L	19
Microbes	3	10 mg B/L (*Opercularia bimarginata*) to 20 mg B/L (*Paramecium caudatum*)	20

TERRESTRIAL DATA:
Chronic studies

Taxonomic Group	Number of Taxa Tested	Range of Endpoint Values (geometric NOEC/EC10)	References
Plant	28	7.2 mg B/kg dw (*Zea mays*) to 56 mg B/kg dw (*Allium cepa*)	21, 22
Invertebrates	9	15.4 mg B/kg dw (*Folsomia candida*) to 87 mg B/kg dw (*Caenorhabditis elegans*)	23, 24
Soil micro	3	12 mg B/kg dw (nitrogen mineralization and nitrification test) to 420 mg B/kg dw (soil nitrogen transformation test)	25, 26

Results[2]: Based on the complete data set, the HC_5 value of the species sensitivity distribution is 10.8 mg B/kg dw.

PHYTOTOXICITY: Boron is an essential micronutrient for healthy growth of plants. It can be harmful to boron sensitive plants in higher quantities. Care should be taken to minimise the amount of borate product released to the environment.

PERSISTENCE AND DEGRADABILITY: Biodegradation is not an applicable endpoint since the product is an inorganic substance.

BIOACCUMMULATIVE POTENTIAL: This product will undergo hydrolysis in water to form undissociated boric acid. Boric acid will not biomagnify through the foodchain. Octanol/Water partition coefficient: Log Pow = -0.7570 @ 25°C (based on boric acid)[27].

MOBILITY IN SOIL: The product is soluble in water and is leachable through normal soil. Adsorption to soils or sediments is insignificant.

OTHER ADVERSE EFFECTS: None.

SECTION 13: DISPOSAL CONSIDERATIONS

WASTE DISPOSAL METHOD: Small quantities of boric can usually be disposed of at municipal landfill sites. No special disposal treatment is required, but refer to state and local regulations for applicable site-specific requirements. Tonnage quantities of product are not recommended to be sent to landfills. Such product should, if possible, be re-used for an appropriate application. Product packaging should be recycled where possible.

RCRA HAZARD CLASS: Boric acid is not listed under any section of the Federal Resource Conservation and Recovery Act (RCRA).

California Hazardous Waste Designation: California identifies substances with acute oral, acute dermal, or acute inhalation LD_{50}s less than 2,500, 4,300, or 10,000 mg/kg, respeitively as " hazardous wastes." Additionally, the aquatic LC_{50} is less than 500 mg/L, the chemical is considered a “hazardous waste.” Boric acid is therefore a "hazardous waste" if spilled in California, and should be handled in accordance with applicable state regulations. Refer to Regulatory Information for additional information.

SECTION 14: TRANSPORT INFORMATION

U.S. DEPARTMENT OF TRANSPORTATION: Boric acid is not a US Department of Transportation (DOT) Hazardous Material.

OTHER AGENCIES: Boric acid has no UN Number and is not regulated under international rail, highway, water, or air transport regulations.

SECTION 15: REGULATORY INFORMATION

CLEAN AIR ACT (MONTREAL PROTOCOL) - SUBSTANCES THAT DEPLETE THE OZONE LAYER: Boric acid is not manufactured with and does not contain any Class I or Class II ozone depleting substances.

REGULATION (EC) NO 689/2008 - EXPORT AND IMPORT OF DANGEROUS CHEMICALS: Boric acid is not listed.

U.S. EPA RCRA: Boric acid is not listed as a hazardous waste under any sections of the Resource Conservation and Recovery Act (RCRA) or regulations (40 CFR 261 *et seq*).

SUPERFUND: CERCLA/SARA. Boric acid is not listed under CERCLA (Comprehensive Environmental Response Compensation and Liability Act) or its 1986 amendments, SARA (Superfund Amendments and Reauthorization Act), including substances listed under Section 313 of SARA, Toxic Chemicals, 42 USC 11023, 40 CFR 372.65, Section 302 of SARA, Extremely Hazardous Substances, 42 USC 11002, 40 CFR 355, or the CERCLA Hazardous Substances list, 42 USC 9604, 40 CFR 302.

SAFE DRINKING WATER ACT (SDWA): Boric acid is not regulated under the SDWA, 42 USC 300g-1, 40 CFR 141 *et seq*. Consult state and local regulations for possible water quality advisories regarding boron compounds.

CLEAN WATER ACT (CWA) (FEDERAL WATER POLLUTION CONTROL ACT): 33 USC 1251 *et seq*.
a) Boric acid is not itself a discharge covered by any water quality criteria of Section 304 of the CWA, 33 USC 1314.
b) It is not on the Section 307 List of Priority Pollutants, 33 USC 1317, 40 CFR 129.
c) It is not on the Section 311 List of Hazardous Substances, 33 USC 1321, 40 CFR 116.

IARC: The International Agency for Research on Cancer (IARC) (a unit of the World Health Organization) does not list or categorize boric acid as a carcinogen.

NTP BIENNIAL REPORT ON CARCINOGENS: Boric acid is not listed.

OSHA CARCINOGEN: Boric acid is not listed.

CALIFORNIA PROPOSITION 65: Boric acid is not listed on the Proposition 65 list of carcinogens or reproductive toxicants.

CHEMICAL INVENTORY LISTING: The listing is sometimes under the Inventory number of the anhydrous form of this inorganic salt.

U.S. EPA TSCA Inventory:	10043-35-3
Canada DSL:	10043-35-3
EINECS:	233-139-2
Australia AICS:	10043-35-3
China IECSC:	10043-35-3
Japanese METI & ISHL:	(1)-63
New Zealand NZIoC:	10043-35-3
Philippines PICCS:	10043-35-3
South Korea KECI:	KE-03499

SECTION 16: OTHER INFORMATION

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OTHER INFORMATION: This SDS was finalized on January 1, 2015 and is compliant with OSHA HCS/HazCom 2012 Final Rule. This replaces the previous verision dated January 1, 2014.

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