

# SAFETY DATA SHEET

## 1. Identification

**Product identifier** STAY CLEAN® LIQUID SOLDERING FLUX, Product Numbers 8302300, 8302350

**Other means of identification**

**SDS number** 0099

**Product Type** Liquid flux

**Recommended use** Soldering of metal.

**Recommended restrictions** None known.

**Manufacturer/Importer/Supplier/Distributor information**

**Supplier** Paul H. Gesswein & Co., Inc.  
 201 Hancock Ave., Bridgeport, CT 06605  
 Phone: 203-366-5400, FAX 203-366-3953  
 email: info@gesswein.com

**Emergency Telephone** CHEMTELL - 800-255-3924

## 2. Hazard(s) identification

**Physical hazards** Not classified.

**Health hazards**

Acute toxicity, oral	Category 4
Acute toxicity, inhalation	Category 4
Skin corrosion/irritation	Category 1
Serious eye damage/eye irritation	Category 1
Specific target organ toxicity, single exposure	Category 1 (optic nerve)
Specific target organ toxicity, single exposure	Category 3 respiratory tract irritation

**OSHA defined hazards** Not classified.

**Label elements**



**Signal word** Danger

**Hazard statement** Harmful if swallowed. Harmful if inhaled. Causes severe skin burns and eye damage. May cause respiratory irritation. Causes damage to organs (optic nerve).

**Precautionary statement**

**Prevention** Do not breathe mist or vapor. Wash thoroughly after handling. Do not eat, drink or smoke when using this product. Use only outdoors or in a well-ventilated area. Wear protective gloves/protective clothing/eye protection/face protection.

**Response** If swallowed: Rinse mouth. Do NOT induce vomiting. If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. If inhaled: Remove person to fresh air and keep comfortable for breathing. 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/doctor. Specific treatment (see this label). Wash contaminated clothing before reuse.

**Storage** Store in a well-ventilated place. Keep container tightly closed. Store locked up.

**Disposal** Dispose of contents/container in accordance with local/regional/national/international regulations.

**Hazard(s) not otherwise classified (HNOC)** None known.

## 3. Composition/information on ingredients

### Mixtures

Chemical name	CAS number	%
Ammonium chloride	12125-02-9	5-25
Zinc chloride	7646-85-7	<30
Hydrochloric acid	7647-01-0	<5
Methanol	67-56-1	<5

**Composition comments** All concentrations are in percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

#### 4. First-aid measures

**Inhalation** Remove victim to fresh air and keep at rest in a position comfortable for breathing. Oxygen or artificial respiration if needed. Call a POISON CENTER or doctor/physician if you feel unwell.

**Skin contact** Take off immediately all contaminated clothing. Rinse skin with water/shower. Call a physician or poison control center immediately. Chemical burns must be treated by a physician. Wash contaminated clothing before reuse.

**Eye contact** Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Call a physician or poison control center immediately.

**Ingestion** Call a physician or poison control center immediately. Rinse mouth. Do not induce vomiting. If vomiting occurs, keep head low so that stomach content doesn't get into the lungs.

**Most important symptoms/effects, acute and delayed** Symptoms of inhalation over-exposure may include sore throat, choking, coughing, difficulty breathing. Lung damage may occur after severe inhalation exposures. Depending on the duration and concentration of over-exposure, skin or eye contact with this product can irritate and burn contaminated tissue. Ingestion overexposure may be harmful or fatal. Prolonged or repeated inhalation over-exposure may cause burns and ulcers to the nose and throat, dental erosion, bronchitis, and stomach pains. Repeated or prolonged over-exposure to this product may result in dermatitis (red, dry, itchy skin) and ulceration.

Dermatitis, other skin disorders, and respiratory conditions may be aggravated by over-exposure to this product.

**Indication of immediate medical attention and special treatment needed** Keep victim under observation. Chemical burns: Flush with water immediately. While flushing, remove clothes which do not adhere to affected area. Call an ambulance. Continue flushing during transport to hospital. Pulmonary function tests, chest X-rays, and nervous system evaluations may prove useful. Consultation with an ophthalmologist is recommended if eye exposure leads to tissue damage. In case of shortness of breath, give oxygen. Symptoms may be delayed.

**General information** If you feel unwell, seek medical advice (show the label where possible). Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Show this safety data sheet to the doctor in attendance.

#### 5. Fire-fighting measures

**Suitable extinguishing media** Water fog. Foam. Dry chemical powder. Carbon dioxide (CO<sub>2</sub>). Halons.

**Unsuitable extinguishing media** None known.

**Specific hazards arising from the chemical** This product is acidic and presents a contact hazard to firefighters. During a fire, irritating and toxic gases (e.g., carbon monoxide, carbon dioxide, hydrogen chloride, nitrogen and zinc oxides, and ammonia) may be generated.

**Special protective equipment and precautions for firefighters** Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

**Fire fighting equipment/instructions** Move containers from fire area if you can do so without risk.

**Specific methods** Use standard firefighting procedures and consider the hazards of other involved materials.

**General fire hazards** No unusual fire or explosion hazards noted. This product is neither flammable nor reactive under normal circumstances; however, it may generate flammable hydrogen gas upon contact with metals.

#### 6. Accidental release measures

**Personal precautions, protective equipment and emergency procedures** Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Wear appropriate protective equipment and clothing during clean-up. Do not breathe mist or vapor. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ensure adequate ventilation. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS.

**Methods and materials for containment and cleaning up**

This product is miscible in water. This material is classified as a water pollutant under the Clean Water Act and should be prevented from contaminating soil or from entering sewage and drainage systems which lead to waterways.

Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Cover with plastic sheet to prevent spreading. Absorb in vermiculite, dry sand or earth and place into containers. Following product recovery, flush area with water.

Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.

Never return spills to original containers for re-use. For waste disposal, see section 13 of the SDS.

**Environmental precautions**

Avoid release to the environment. Prevent further leakage or spillage if safe to do so. Avoid discharge into drains, water courses or onto the ground. Inform appropriate managerial or supervisory personnel of all environmental releases.

**7. Handling and storage****Precautions for safe handling**

Do not breathe mist or vapor. Provide adequate ventilation. Do not use in areas without adequate ventilation. Do not get in eyes, on skin, or on clothing. Avoid prolonged exposure. Do not taste or swallow. When using, do not eat, drink or smoke. Use only outdoors or in a well-ventilated area. Wear appropriate personal protective equipment. Wash hands thoroughly after handling. Handle and open container with care. Observe good industrial hygiene practices. Avoid release to the environment.

**Conditions for safe storage, including any incompatibilities**

Store locked up. Store in original tightly closed container. Store away from direct sunlight, sources of intense heat, or where freezing is possible. Store in a well-ventilated place. Store away from incompatible materials (see Section 10 of the SDS). Material should be stored in secondary containers or in a diked area, as appropriate. Storage and use areas should be covered with impervious materials.

**8. Exposure controls/personal protection****Occupational exposure limits****US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)**

Components	Type	Value	Form
Hydrochloric acid (CAS 7647-01-0)	Ceiling	7 mg/m <sup>3</sup>	
Methanol (CAS 67-56-1)	PEL	5 ppm	
		260 mg/m <sup>3</sup>	
Zinc chloride (CAS 7646-85-7)	PEL	200 ppm	
		1 mg/m <sup>3</sup>	Fume.

**US. ACGIH Threshold Limit Values**

Components	Type	Value	Form
Ammonium chloride (CAS 12125-02-9)	STEL	20 mg/m <sup>3</sup>	Fume.
	TWA	10 mg/m <sup>3</sup>	Fume.
Hydrochloric acid (CAS 7647-01-0)	Ceiling	2 ppm	
	STEL	250 ppm	
Methanol (CAS 67-56-1)	TWA	200 ppm	
	STEL	2 mg/m <sup>3</sup>	Fume.
Zinc chloride (CAS 7646-85-7)	STEL	2 mg/m <sup>3</sup>	Fume.
	TWA	1 mg/m <sup>3</sup>	Fume.

**US. NIOSH: Pocket Guide to Chemical Hazards**

Components	Type	Value	Form
Ammonium chloride (CAS 12125-02-9)	STEL	20 mg/m <sup>3</sup>	Fume.
	TWA	10 mg/m <sup>3</sup>	Fume.
Hydrochloric acid (CAS 7647-01-0)	Ceiling	7 mg/m <sup>3</sup>	
	STEL	5 ppm	
Methanol (CAS 67-56-1)	STEL	325 mg/m <sup>3</sup>	

## US. NIOSH: Pocket Guide to Chemical Hazards

Components	Type	Value	Form
Zinc chloride (CAS 7646-85-7)	TWA	250 ppm	Fume.
		260 mg/m <sup>3</sup>	
	STEL	200 ppm	
		2 mg/m <sup>3</sup>	
TWA	1 mg/m <sup>3</sup>	Fume.	

### Biological limit values

#### ACGIH Biological Exposure Indices

Components	Value	Determinant	Specimen	Sampling Time
Methanol (CAS 67-56-1)	15 mg/l	Methanol	Urine	*

\* - For sampling details, please see the source document.

### Exposure guidelines

#### US - California OELs: Skin designation

Methanol (CAS 67-56-1)

Can be absorbed through the skin.

#### US - Minnesota Haz Subs: Skin designation applies

Methanol (CAS 67-56-1)

Skin designation applies.

#### US - Tennessee OELs: Skin designation

Methanol (CAS 67-56-1)

Can be absorbed through the skin.

#### US ACGIH Threshold Limit Values: Skin designation

Methanol (CAS 67-56-1)

Can be absorbed through the skin.

#### US. NIOSH: Pocket Guide to Chemical Hazards

Methanol (CAS 67-56-1)

Can be absorbed through the skin.

#### Appropriate engineering controls

Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. Eye wash facilities and emergency shower must be available when handling this product.

#### Individual protection measures, such as personal protective equipment

##### Eye/face protection

Chemical respirator with organic vapor cartridge and full facepiece.

##### Skin protection

###### Hand protection

Wear neoprene or rubber gloves for routine industrial use.

###### Other

Wear appropriate chemical resistant clothing. Use of an impervious apron is recommended.

##### Respiratory protection

Chemical respirator with organic vapor cartridge and full facepiece.

##### Thermal hazards

Wear appropriate thermal protective clothing, when necessary.

#### General hygiene considerations

Keep away from food and drink. Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

## 9. Physical and chemical properties

### Appearance

#### Physical state

Liquid.

#### Form

Liquid. Liquid

#### Color

Clear colorless.

#### Odor

Slightly sweet.

#### Odor threshold

Not available.

#### pH

Acidic.

#### Melting point/freezing point

Not available.

#### Initial boiling point and boiling range

Not available.

#### Flash point

Not flammable.

#### Evaporation rate

> 1 (nBuAc = 1).

#### Flammability (solid, gas)

Not available.

**Upper/lower flammability or explosive limits**

<b>Flammability limit - lower (%)</b>	Not available.
<b>Flammability limit - upper (%)</b>	Not available.
<b>Explosive limit - lower (%)</b>	Not available.
<b>Explosive limit - upper (%)</b>	Not available.

**Vapor pressure**

Not available.

**Vapor density**

4 (air = 1).

**Relative density**

1.32 (water = 1).

**Solubility(ies)****Solubility (water)** Slightly soluble.**Partition coefficient (n-octanol/water)**

Not available.

**Auto-ignition temperature**

Not available.

**Decomposition temperature**

Not available.

**Viscosity**

Not available.

**Other information**

Litmus paper will turn red upon contact with this product. The odor may also act as a distinguishing characteristic of this product.

**10. Stability and reactivity****Reactivity**

The product is stable and non-reactive under normal conditions of use, storage and transport.

**Chemical stability**

Material is stable under normal conditions.

**Possibility of hazardous reactions**

No dangerous reaction known under conditions of normal use.

**Conditions to avoid**

Contact with incompatible materials. Extreme temperatures.

**Incompatible materials**

Acid. alkalis and their carbonates, hydrogen cyanide, interhalogens, ammonium nitrate, potassium chlorate, lead and silver salts. Strong oxidizing agents. Amines. Do not mix with other chemicals. This product is neither flammable nor reactive under normal circumstances; however, it may generate flammable hydrogen gas upon contact with metals.

**Hazardous decomposition products**Carbon dioxide (CO<sub>2</sub>). Nitrogen oxides (NO<sub>x</sub>). Ammonia. Hydrogen Chloride (HCl). Zinc oxides.**11. Toxicological information****Information on likely routes of exposure****Inhalation**

Harmful if inhaled. May cause allergy or asthma symptoms or breathing difficulties if inhaled. May cause damage to organs by inhalation. If vapors, mists, or sprays of this product are inhaled, they can irritate and burn the nose, throat, and respiratory system. Symptoms of inhalation over-exposure may include sore throat, choking, coughing, and difficulty breathing. Prolonged or repeated over-exposure may cause burns and ulcers to the nose and throat, dental erosion, bronchitis, and stomach pains. It has been reported that a worker developed asthmatic symptoms after performing soldering work with a flux containing Ammonium and Zinc Chlorides (components of this product). It has been reported that inhalation of Methanol (a component of this product) vapors in high concentrations can cause blindness. Severe inhalation overexposure may cause pulmonary edema (a life-threatening accumulation of fluid in the lungs) or pneumonitis. Symptoms of pulmonary edema (e.g., shortness of breath, chest pains) can be delayed for several hours after exposure. Severe inhalation of vapors or fumes (as may occur if individuals are exposed in poorly ventilated areas, such as confined spaces) may be harmful.

**Skin contact**

Causes severe skin burns. Depending on the duration and concentration of over-exposure, skin contact with this product can irritate and burn the skin. Repeated or prolonged over-exposure to this product may result in dermatitis (red, dry, itchy skin) and ulceration. Methanol (a component of this product) is readily absorbed through the skin. Because Methanol is a minor component of this product, skin absorption is not anticipated to be a significant route of over-exposure.

**Eye contact**

Depending on the duration and concentration of over-exposure, eye contact with this product can irritate and burn the eyes. Eye over-exposure can cause pain, tearing, and redness. Severe eye over-exposure may cause blindness. Causes serious eye damage.

**Ingestion**

Harmful if swallowed. Causes digestive tract burns. If this flux is ingested, nausea, vomiting, and diarrhea may occur (depending on the amount of the product swallowed). Severe ingestion exposures may result in damage to the tissues of the gastrointestinal system, and death.

**Symptoms related to the physical, chemical and toxicological characteristics**

Symptoms of inhalation over-exposure may include sore throat, choking, coughing, difficulty breathing. Lung damage may occur after severe inhalation exposures. Depending on the duration and concentration of over-exposure, skin or eye contact with this product can irritate and burn contaminated tissue. Ingestion overexposure may be harmful or fatal. Prolonged or repeated inhalation over-exposure may cause burns and ulcers to the nose and throat, dental erosion, bronchitis, and stomach pains. Repeated or prolonged over-exposure to this product may result in dermatitis (red, dry, itchy skin) and ulceration.

Dermatitis, other skin disorders, and respiratory conditions may be aggravated by over-exposure to this product.

**Information on toxicological effects**

**Acute toxicity** Harmful if inhaled. Harmful if swallowed. May cause respiratory irritation.

Components	Species	Test Results
Hydrochloric acid (CAS 7647-01-0)		
<b>Acute</b>		
<i>Inhalation</i>		
LC50	Rat	3124 mg/l, 1 Hours
<i>Oral</i>		
LD50	Rabbit	900 mg/kg
Methanol (CAS 67-56-1)		
<b>Acute</b>		
<i>Inhalation</i>		
LC50	Rat	22500 ppm, 8 hours
<i>Oral</i>		
LD50	Rat	6200 mg/kg

\* Estimates for product may be based on additional component data not shown.

**Skin corrosion/irritation** Causes severe skin burns and eye damage.

**Serious eye damage/eye irritation** Causes serious eye damage.

**Respiratory or skin sensitization**

**Respiratory sensitization** Not a respiratory sensitizer.

It has been reported that a worker developed asthmatic symptoms after performing soldering work with a flux containing Ammonium and Zinc Chlorides (components of this product).

**Skin sensitization** This product is not expected to cause skin sensitization.

**Germ cell mutagenicity** No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.

**Carcinogenicity** This product is not considered to be a carcinogen by IARC, ACGIH, NTP, or OSHA.

**IARC Monographs. Overall Evaluation of Carcinogenicity**

Hydrochloric acid (CAS 7647-01-0) 3 Not classifiable as to carcinogenicity to humans.

**OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)**

Not listed.

**Reproductive toxicity** This product is not expected to cause reproductive or developmental effects. Clinical studies on test animals exposed to relatively high doses of Methanol and Zinc Chloride (components of this product) indicate teratogenic effects and adverse reproductive effects.

**Specific target organ toxicity - single exposure** Causes damage to organs (optic nerve). May cause respiratory irritation.

**Specific target organ toxicity - repeated exposure** Not classified.

**Aspiration hazard** Not an aspiration hazard.

**Chronic effects** Prolonged inhalation may be harmful.

**12. Ecological information**

**Ecotoxicity** Very toxic to aquatic life with long lasting effects.

Components	Species	Test Results
Hydrochloric acid (CAS 7647-01-0)		
<b>Aquatic</b>		
Fish	LC50	Western mosquitofish (Gambusia affinis) 282 mg/l, 96 hours

\* Estimates for product may be based on additional component data not shown.

**Persistence and degradability** No data is available on the degradability of this product.

**Bioaccumulative potential**

**Partition coefficient n-octanol / water (log Kow)**

Methanol (CAS 67-56-1) -0.77

**Mobility in soil** No data available.

**Other adverse effects** No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

**13. Disposal considerations**

**Disposal instructions** Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Do not allow this material to drain into sewers/water supplies. Do not contaminate ponds, waterways or ditches with chemical or used container. Dispose of contents/container in accordance with local/regional/national/international regulations.

**Local disposal regulations** Dispose in accordance with all applicable regulations.

**Hazardous waste code** The waste code should be assigned in discussion between the user, the producer and the waste disposal company.

**Waste from residues / unused products** Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).

**Contaminated packaging** Empty containers should be taken to an approved waste handling site for recycling or disposal. Since emptied containers may retain product residue, follow label warnings even after container is emptied.

**14. Transport information**

**DOT**

**UN number** UN1760  
**UN proper shipping name** Corrosive liquids, n.o.s. (Zinc Chloride, Hydrochloric Acid)  
**Transport hazard class(es)**  
**Class** 8  
**Subsidiary risk** -  
**Label(s)** 8  
**Packing group** III  
**Environmental hazards**  
**Marine pollutant** Yes  
**Special precautions for user** Read safety instructions, SDS and emergency procedures before handling.  
**Special provisions** IB3, T7, TP1, TP28  
**Packaging exceptions** 154  
**Packaging non bulk** 203  
**Packaging bulk** 241

**IATA**

**UN number** UN1760  
**UN proper shipping name** Corrosive liquids, n.o.s. (Zinc Chloride, Hydrochloric Acid)  
**Transport hazard class(es)**  
**Class** 8  
**Subsidiary risk** -  
**Label(s)** 8  
**Packing group** III  
**Environmental hazards** Yes  
**Special precautions for user** Read safety instructions, SDS and emergency procedures before handling.

**IMDG**

**UN number** UN1760  
**UN proper shipping name** Corrosive liquids, n.o.s. (Zinc Chloride, Hydrochloric Acid)

**Transport hazard class(es)**

**Class** 8  
**Subsidiary risk** -  
**Label(s)** 8

**Packing group** III

**Environmental hazards**

**Marine pollutant** Yes

**EmS** Not available.

**Special precautions for user** Read safety instructions, SDS and emergency procedures before handling.

**Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code** Not established.

**General information** DOT Regulated Marine Pollutant. IMDG Regulated Marine Pollutant.

**15. Regulatory information**

**US federal regulations** This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.  
 All components are on the U.S. EPA TSCA Inventory List.

**TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)**

Not regulated.

**OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)**

Not listed.

**CERCLA Hazardous Substance List (40 CFR 302.4)**

Ammonium chloride (CAS 12125-02-9)	LISTED
Hydrochloric acid (CAS 7647-01-0)	LISTED
Methanol (CAS 67-56-1)	LISTED
Zinc chloride (CAS 7646-85-7)	LISTED

**Superfund Amendments and Reauthorization Act of 1986 (SARA)**

**Hazard categories** Immediate Hazard - Yes  
 Delayed Hazard - No  
 Fire Hazard - No  
 Pressure Hazard - No  
 Reactivity Hazard - No

**SARA 302 Extremely hazardous substance**

Chemical name	CAS number	Reportable quantity (pounds)	Threshold planning quantity (pounds)	Threshold planning quantity, lower value (pounds)	Threshold planning quantity, upper value (pounds)
Hydrochloric acid	7647-01-0	5000	500		

**SARA 311/312 Hazardous chemical** Yes

**SARA 313 (TRI reporting)**

Chemical name	CAS number	% by wt.
Ammonium chloride	12125-02-9	5-25
Zinc chloride	7646-85-7	<30
Hydrochloric acid	7647-01-0	<5
Methanol	67-56-1	<5

**Other federal regulations****Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List**

Hydrochloric acid (CAS 7647-01-0)  
 Methanol (CAS 67-56-1)

**Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)**

Hydrochloric acid (CAS 7647-01-0)

**Safe Drinking Water Act (SDWA)** Not regulated.



**Drug Enforcement Administration (DEA). List 2, Essential Chemicals (21 CFR 1310.02(b) and 1310.04(f)(2) and Chemical Code Number**

Hydrochloric acid (CAS 7647-01-0) 6545

**Drug Enforcement Administration (DEA). List 1 & 2 Exempt Chemical Mixtures (21 CFR 1310.12(c))**

Hydrochloric acid (CAS 7647-01-0) 20 %WV

**DEA Exempt Chemical Mixtures Code Number**

Hydrochloric acid (CAS 7647-01-0) 6545

**US state regulations**

**US. Massachusetts RTK - Substance List**

Ammonium chloride (CAS 12125-02-9)

Hydrochloric acid (CAS 7647-01-0)

Methanol (CAS 67-56-1)

Zinc chloride (CAS 7646-85-7)

**US. New Jersey Worker and Community Right-to-Know Act**

Ammonium chloride (CAS 12125-02-9)

Hydrochloric acid (CAS 7647-01-0)

Methanol (CAS 67-56-1)

Zinc chloride (CAS 7646-85-7)

**US. Pennsylvania Worker and Community Right-to-Know Law**

Ammonium chloride (CAS 12125-02-9)

Hydrochloric acid (CAS 7647-01-0)

Methanol (CAS 67-56-1)

Zinc chloride (CAS 7646-85-7)

**US. Rhode Island RTK**

Ammonium chloride (CAS 12125-02-9)

Hydrochloric acid (CAS 7647-01-0)

Methanol (CAS 67-56-1)

Zinc chloride (CAS 7646-85-7)

**US. California Proposition 65**

WARNING: This product contains a chemical known to the State of California to cause birth defects or other reproductive harm.

**US - California Proposition 65 - Carcinogens & Reproductive Toxicity (CRT): Listed substance**

Methanol (CAS 67-56-1)

**International Inventories**

Country(s) or region	Inventory name	On inventory (yes/no)*
Australia	Australian Inventory of Chemical Substances (AICS)	Yes
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No
China	Inventory of Existing Chemical Substances in China (IECSC)	Yes
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	Yes
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Inventory of Existing and New Chemical Substances (ENCS)	Yes
Korea	Existing Chemicals List (ECL)	Yes
New Zealand	New Zealand Inventory	Yes
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	Yes
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

\*A "Yes" indicates this product complies with the inventory requirements administered by the governing country(s).

A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

**16. Other information, including date of preparation or last revision**

**Issue date** 18-February-2015

**Revision date** -

**Version #** 01

**NFPA ratings****Disclaimer**

Harris Products Group cannot anticipate all conditions under which this information and its product, or the products of other manufacturers in combination with its product, may be used. It is the user's responsibility to ensure safe conditions for handling, storage and disposal of the product, and to assume liability for loss, injury, damage or expense due to improper use. The information in the sheet was written based on the best knowledge and experience currently available.