and Local Calls

## MATERIAL SAFETY DATA SHEET

#### **SECTION 1 - PRODUCT AND COMPANY IDENTIFICATION** PRODUCT NAME: **REVIVE!** PRODUCT NUMBER: DATE: May 31, 2011 TRADE NAME: REVIVE! GENERAL USE: Swimming pool water treatment CHEMICAL FAMILY Inorganic PRODUCT DESCRIPTION: Colorless Clear Liquid. MANUFACTURED FOR APi TELEPHONE NUMBER (General Inquiries) DATE PREPARED: May 31, 2011 561-743-0449 January 1, 2011 SUPERSEDES: ADDRESS (NUMBER, STREET, P.O. BOX) **CHEMTEL 24-HOUR EMERGENCY TELEPHONE NUMBERS** 880 Jupiter Park Drive, Suite 14 1-800-255-3924 813-248-0585 ChemTel (CITY, STATE AND ZIP CODE) COUNTRY North America International

**SECTION 2 - HAZARDS IDENTIFICATION** 

EMERGENCY OVERVIEW

Jupiter, FL 33458

Caution! Causes irritation and possible burns by all exposure routes. Target Organs: Respiratory system, gastrointestinal system, eyes, skin.

USA

DESCRIPTION: REVIVE! is a 15-25% Active ingredient solution in water. Product is non-flammable, but may produce irritating vapors under fire conditions.

USDOT HAZARD SYMBOL(S)

None

HMIS HAZARD RATINGS

0 = INSIGNIFICANT, 1 = SLIGHT, 2 = MODERATE, 3 = HIGH, 4 = EXTREME

HEALTH:	1
FLAMMABILITY:	0
PHYSICAL HAZARD:	0

(Toll Free)

REQUIRED PERSONAL PROTECTIVE EQUIPMENT:

HMIS PERSONAL PROTECTIVE EQUIPMENT LETTER:

Safety glasses, gloves and apron should be worn while handling product.



## POTENTIAL HEALTH EFFECTS

INHALATION:

May be harmful if inhaled. Causes respiratory tract irritation.

SKIN

May be harmful if absorbed through skin. Causes skin irritation

EYES:

Causes eye irritation.

INGESTION:

May be harmful if swallowed.

CARCINOGENICITY:

NTP? NO IARC MONOGRAPHS? NO OSHA REGULATED? NO CALIFORNIA, Prop.65? NO ESIS NOTATION? NO

SECTION 3-HAZARDOUS INGREDIENTS						
Hazardous Components	% (by Weight)	CAS#				
Proprietary	Proprietary	Proprietary				

NOTES: This Material Safety Data Sheet is prepared to comply with the United States Occupational Safety and Health Administration (OSHA) Hazard Communication Standard (29 CFR 1910.1200), the Canadian Workplace Hazardous Materials Information System (WHMIS), and European Union Directives. Hazard symbols and risk phrases are based on maximum listed concentration of each hazardous ingredient. Unlisted ingredients are not "hazardous" per the OSHA Hazard Communication Standard (29 CFR 1910.1200), the Canadian Workplace Hazardous Materials Information System (WHMIS) or the European (GHS) directives and are considered trade secrets under US Federal Law (29 CFR and 40 CFR), Canadian Law (Health Canada Legislation), and European Union Directives.

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#### SECTION 4 - FIRST AID MEASURES

INHALATION:

Remove victim to fresh air. Seek medical attention if breathing remains difficult.

EYES:

Remove contact lenses if possible. Immediately flush eyes with copious amounts of potable water for 15 min. Seek medical attention if irritation persists.

SKIN:

Wash material off skin with copious amounts of soap and water.

INGESTION:

Do not induce vomiting. Get medical aid immediately. Call a poison control center.

## SECTION 5 - FIRE FIGHTING MEASURES

#### GENERAL HAZARDS:

As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear.

EXTINGUISHING MEDIA:

Use water spray, dry chemical, carbon dioxide, or chemical foam.

FIRE FIGHTING PROCEDURES:

Not flammable or combustible.

UNUSUAL FIRE AND EXPLOSION HAZARDS:

None.

HAZARDOUS COMBUSTION PRODUCTS:

Aluminum oxides, Aluminum Chlorides. May emit noxious fumes under fire conditions.

#### SECTION 6 - ACCIDENTAL RELEASE MEASURES

### STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED:

Use proper personal protective equipment as indicated in Section 8.

Spills/Leaks:

Vacuum or mop up material and place into a suitable disposal container.

Avoid generating dusty conditions from dried product. Provide ventilation. Do not let this chemical enter the environment.

## SECTION 7 - HANDLING AND STORAGE

#### PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE:

Handling: Do not get in eyes, on skin, or on clothing. Do not ingest or inhale.

Storage: Store in a cool, dry place. Store in a tightly closed container.

SECTION 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION						
Hazardous Components	CAS#	ACGIH Exposure Limits (mg/m3 unless otherwise noted)	OSHA Exposure Limits (mg/m3 unless otherwise noted)			
Proprietary	Proprietary	NE	NE			

## PERSONAL PROTECTION

#### RESPIRATORY PROTECTION:

Give adequate ventilation to the premises where the product is stored and/or handled. Wear a dust mask if removing dried product generating dusty conditions.

#### PROTECTIVE GLOVES:

Use any impermeable gloves to protect hands from skin contact with this product.

#### EYE PROTECTION:

Wear safety glasses with splash protective side shields or chemical safety goggles.

### OTHER PROTECTIVE CLOTHING OR EQUIPMENT:

Not needed for normal use.

## WORK / HYGIENIC PRACTICES:

Use good personal hygiene, washing exposed areas of skin several times daily before eating drinking, smoking or using restroom facilities. Launder contaminated clothing before re-use.

# **MATERIAL SAFETY DATA SHEET**

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PRODUCT NUMBER:		DA		May 31, 2011			
	CTION 9 - PHYSICAL	AND CHEMICAL PROPE	RTIES				
APPEARANCE AND ODOR		VAPOR PRESSURE					
Colorless, clear liquid.		NA					
pH		•	SPECIFIC GRAVITY (WATER = 1)				
4.0 - 4.4 (15% @ 25°C) MELTING POINT		1.33 @ 25°C SOLUBILITY IN WATER					
NE		Soluble					
FLASH POINT							
None NA							
FLAMMABLE LIMITS							
				NA			
AUTOIGNITION TEMPERATUR	RE	EVAPORATION RATE (WATER = 1)					
NA		NA					
VOLATILE ORGANIC COMPOL	JND (VOC) INFORMATION	l .					
NA	CECTION 40 CT	ABILITY AND REACTIVITY	/				
CTARULTY	SECTION 10-31						
STABILITY Stable.		CONDITIONS TO AVOID: Oxidizing materials and direct sunlight for periods.					
INCOMPATIBILITY (MATERIAL	S TO AVOID):	Oxidizing materials and direct sur	iigiit ioi pe	illous.			
Oxidizing materials and direct su							
HAZARDOUS DECOMPOSITION							
Aluminum oxides, Aluminum Ch		umes under fire conditions.					
HAZARDOUS POLYMERIZATION		CONDITIONS TO AVOID:					
Will not occur.		None related to polymerization.					
	SECTION 11 - TOX	ICOLOGICAL INFORMATION	ON				
	Con	nplete Product					
Oral LD <sub>50</sub>	Product is likely to be a ga	stro-intestinal irritant.					
Dermal LD <sub>50</sub>	Product is irritating by cont	act with skin.					
Inhalation LC <sub>50</sub>	Not known - product is an	irritant to the respiratory tract.					
Irritation	Severe irritant to eyes mod	derate irritant to respiratory tract an	d to skin .				
	Produ	uct Components					
Hazardous Components	CAS#	LD50 of Ingredient (Oral, Rat - unless otherwise specifie	(Inha	LC50 of Ingredient lation, Rat - unless otherwise specified)			
Proprietary	Proprietary	3311 mg/kg		NE			
	SECTION 12 - EC	OLOGICAL INFORMATION	I				
Do not empty into drains.							
	SECTION 13 - DIS	POSAL CONSIDERATION	S				
WASTE DISPOSAL METHOD:							
Dispose of in a manner consiste		-					
SECTION 14 - TRANSPORT INFORMATION							
PROPER SHIPPING NAME:	None						
DOT HAZARD CLASS / Pack G		Group.	None				
REFERENCE: 49CFR, IM	IMDG HAZARD CLASS: None						
UN / NA IDENTIFICATION NUM	MBER: <b>None</b>	UN TDG Class / Pack Group: None					
LABEL: <b>None</b>							
HAZARD SYMBOLS:	None						
	HMIS (Canada) TDG inform	only. Client is urged to consult CFR mation manuals for detailed regula of shinning					

specific container sizes, packaging materials and methods of shipping.

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**SECTION 15 - REGULATORY INFORMATION** 

TSCA (USA - Toxic Substance Control Act): Listed

SARA TITLE III (USA - Superfund Amendments and Reauthorization Act):

Acute Health: Yes Chronic Health: NO Fire: NO Sudden Release of Pressure: NO

Reactive: NO

SARA 313 REPORTABLE INGREDIENTS: None

CERCLA (USA - Comprehensive Response Compensation and Liability Act):

None
California Prop 65, Safe Drinking Water and Toxic Enforcement Act of 1986:

None

#### **SECTION 16 - OTHER INFORMATION**

### Legend:

ACGIH American Congress of Government Industrial Hygienists

CAS Chemical Abstracts Service

HMIS Hazardous Materials Identification System
IARC International Agency for Research on Cancer
NA Not Available ND Not Determined
NE Not Established NR Not Reported
NIOSH National Institute for Occupational Safety and Health

NTP National Toxicology Program

OSHA Occupational Safety and Health Administration

#### REVISION SUMMARY:

Revised to US and Canada (WHMIS) standards 5/31/2011 supersedes previous issues. --JTV--

### MSDS Prepared by:

ChemTel Inc.

1305 North Florida Avenue

Tampa, Florida USA 33602-2902

Toll Free North America 1-888-255-3924 Intl. +01 813-248-0573

Website: www.chemtelinc.com



The information contained herein is believed to be accurate but is not warranted to be so. Data and calculations are based on information furnished by the manufacturer of the product and manufacturers of the components of the product. Users are advised to confirm in advance of need that information is current, applicable and suited to the circumstances of use. Vendor assumes no responsibility for injury to vendee or third persons proximately caused by the material if reasonable safety procedures are not adhered to as stipulated in the data sheet. Furthermore, vendor assumes no responsibility for injury caused by abnormal use of this material even if reasonable safety procedures are followed. Any questions regarding this product should be directed to the manufacturer of the product as described in Section 1.