



80 Northwest Boulevard • Nashua, NH 03063  
Tel: 603-889-8899 • Fax: 603-880-6520  
[www.deltaeducation.com](http://www.deltaeducation.com)

Dear Educator,

This file contains the Safety Data Sheets (SDS) for FOSS ENVIRONMENTS, 3<sup>rd</sup> Edition as of July 24, 2017

Because kit contents can sometimes be replaced, we recommend searching our online portal of SDS for current sheets as you need them. To make that searching easier, we have provided a listing below of the items with SDS in this kit.

Portal: <http://www.schoolspecialty.com/sds>

<b>Part Number to Search</b>	<b>Item Description</b>
020-5457	Brine shrimp eggs
190-0139-0	Kosher salt, 3 lb. (1.5 kg)/box
201-1217-0	Thermometer
030-9902	Water conditioner, bottle

Note: The part numbers to search for in the portal are often not the same part numbers used to order replacements. To order replacements, please visit [www.deltaeducation.com/refillcenter](http://www.deltaeducation.com/refillcenter)

If you have any questions, please contact Customer Care at 800-258-1302 for assistance.

# Ocean Star International, Inc.

65 NORTH STONE ROAD  
P.O. BOX 643  
SNOWVILLE, UT 84336

TELEPHONE 435-872-8217  
FAX 435-872-8272

Ocean Star International, Inc.  
Safety Data Sheet (SDS)

Page 1 of 2  
Date: 6/15/2015

## Brine Shrimp Eggs (*Artemia franciscana* Cysts)

### Section 1 – Chemical Product and Company Identification

Brine Shrimp Eggs (*Artemia franciscana* Cysts)

Ocean Star International, Inc.

65 North Stone Rd.

Snowville UT 84336

Emergency Number: 800-423-3447

Signal Word: N/A

### Section 2 – Hazards Identification

This product is considered to be nonhazardous according to GHS classification for the Hazard Communication Standard. Treat all laboratory products with caution. Although this material is considered to be nonhazardous, unpredictable reaction among chemicals are always possible. Prudent laboratory practices should be observed.

### Section 3 – Composition, Information on Ingredients

Component Name:	Brine shrimp eggs, species: <i>Artemia franciscana</i>	Formula:	Unspecified
CAS Number:	None established	Formula Weight:	Unspecified

### Section 4 – First Aid Measures

Call a POISON CENTER or physician if you feel unwell.

**If Inhaled:** Remove victim to fresh air and keep at rest in a position comfortable for breathing.

**If in Eyes:** Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do so. Continue rinsing.

**If on skin:** Wash with plenty of water.

**If swallowed:** Rinse mouth. Call a POISON CENTER or physician if you feel unwell.

### Section 5 – Fire Fighting Measures

Nonflammable solid

When heated to decomposition, may emit toxic fumes

**In case of fire:** Use a tri-class dry chemical fire extinguisher

NFPA Code: None established

### Section 6 - Accidental Release Measures

Use a damp paper towel to pick up the product, place in a sealed bag or container, and dispose. Wash spill site after material pickup is complete. See Section 8 and 13 for further information.

### Section 7 – Handling and Storage

Organic Miscellaneous – Store in a Cool Dry place. A frost free refrigerator or freezer is best.

### Section 8 – Exposure Controls, Personal Protection

Wear eye protection. Wash hands thoroughly after handling.



**Section 9 – Physical and Chemical Properties**

Brown powder, Odorless  
 Culture in brackish water at no more than 36 g/L  
 Biological use: brine shrimp eggs

**Section 10 – Stability and Reactivity**

Shelf Life: Good, if kept dry and cool.

**Section 11 – Toxicological Information**

Acute effects:	N.A.	ORL-RAT LD <sub>50</sub> :	N.A.
Chronic effects:	N.A.	IHL-RAT LC <sub>50</sub> :	N.A.
Target organs:	N.A.	SKN-RBT LD <sub>50</sub> :	N.A.

N.A. = Not available, not all health aspect of this substance have been fully investigated.

**Section 12 – Ecological Information**

Brine shrimp eggs (cysts) are a natural, living product produced in the Great Salt Lake, Utah as an "over-wintering" stage. They naturally hatch in the Spring of each year to re-establish the population in the Great Salt Lake, Utah.

**Section 13 – Disposal Considerations**

Please review all federal, state and local regulations that may apply before proceeding. Ocean Star International, Inc. recommends you use dispose in non-recycle garbage.

**Section 14 – Transport Information**

Shipping Name: Not regulated.                      Hazard class: N/A                      UN number: N/A

N/A = Not applicable

**Section 15 – Regulatory Information**

Not Listed.

**Section 16 – Other Information**

This Safety Data Sheet (SDS) is for guidance and is based upon information and tests believed to be reliable. Ocean Star International, Inc. makes no guarantee of the accuracy or completeness of the data and shall not be liable for any damages, relating hereto. The data are offered solely for your consideration, investigation and verification. The data should not be confused with local, state, federal or insurance mandates, regulation, or requirements and CONSTITUTE NO WARRANTY. Any use of these data and information must be determined by the science instructor or other person in charge to be in accordance with applicable local, state or federal laws and regulations. The conditions or methods of handling, storage, use, and disposal of the product(s) described here are beyond the control of Ocean Star International, Inc. and may be beyond our knowledge. FOR THIS AND OTHER REASONS, WE DO NOT ASSUME RESPONSIBILITY AND EXPRESSLY DISCLAIM LIABILITY FOR LOSSES, DAMAGES OR EXPENSES ARISING OUT OF OR IN ANY WAY CONNECTED WITH THE HANDLING, STORAGE, USE, OR DISPOSAL OF THIS PRODUCT(S).

Date: 6/15/15



# SAFETY DATA SHEET

## 1. Identification

<b>Product identifier</b>	<b>Sodium Chloride Food-Industrial (YPS Treated)</b>
<b>Other means of identification</b>	
<b>SDS number</b>	S3
<b>Synonyms</b>	Diamond Crystal® Granulated Salt. * Flo-Ever® Granulated Salt - CMF®. * Gulf Shore Boat & Boil® Salt. * Flo-Ever® Fine Granulated Salt - CMF®. * Top-Flo® Plus Granulated Salt. * Top-Flo® Granulated Salt. * Hi-Tex® Granulated Salt. * Fine Blending Granulated Salt - YPS Treated. * Premier™ Extra Coarse Flake Salt. * Sodium Chloride (Salt). * Premier™ Select Coarse Flake Salt. * Premier™ Topping Flake Salt. * Premier™ Fine Flake Salt. * Purified Sea Salt with YPS. * Private Label Granulated Salt. * Sodium Chloride (Salt) - Treated with Yellow Prussiate of Soda (YPS). * Seafarer's® Fine Salt.
<b>Recommended use</b>	Salt may be intended for food or animal feed (agricultural) as well as several industrial applications including deicing and water conditioning.
<b>Recommended restrictions</b>	None known.
<b>Manufacturer/Importer/Supplier/Distributor information</b>	
<b>Manufacturer</b>	
<b>Company name</b>	Cargill Incorporated
<b>Address</b>	Minneapolis, MN 55440
<b>Telephone</b>	1-888-385-7258
<b>Website</b>	www.cargillsalt.com
<b>Emergency telephone number</b>	CHEMTREC (800) 424-9300

## 2. Hazard(s) identification

<b>Physical hazards</b>	Not classified.
<b>Health Hazards</b>	Not classified.
<b>OSHA defined hazards</b>	Not classified.
<b>Label elements</b>	
<b>Hazard symbol</b>	None.
<b>Signal word</b>	None.
<b>Hazard statement</b>	The mixture does not meet the criteria for classification.
<b>Precautionary statement</b>	
<b>Prevention</b>	Observe good industrial hygiene practices.
<b>Response</b>	Wash hands after handling.
<b>Storage</b>	Store away from incompatible materials.
<b>Disposal</b>	Dispose of waste and residues in accordance with local authority requirements.
<b>Hazard(s) not otherwise classified (HNOC)</b>	None known.

## 3. Composition/information on ingredients

### Mixtures

<b>Chemical name</b>	<b>CAS number</b>	<b>%</b>
Sodium Chloride	7647-14-5	99.9987-99.9995
Sodium Ferrocyanide Decahydrate	13601-19-9	0.0005-0.0013

GRAS Substance (Generally Recognized As Safe).

## 4. First-aid measures

<b>Inhalation</b>	If dust from the material is inhaled, remove the affected person immediately to fresh air. Call a physician if symptoms develop or persist.
<b>Skin contact</b>	Wash off with soap and water. Get medical attention if irritation develops and persists.
<b>Eye contact</b>	Rinse with water. Get medical attention if irritation develops and persists.
<b>Ingestion</b>	Give one or two glasses of water if patient is alert and able to swallow. Get medical attention if symptoms occur.
<b>Most important symptoms/effects, acute and delayed</b>	Direct contact with eyes may cause temporary irritation.
<b>Indication of immediate medical attention and special treatment needed</b>	Treat symptomatically.
<b>General information</b>	Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

## 5. Fire-fighting measures

<b>Suitable extinguishing media</b>	Water fog. Foam. Dry chemical powder. Carbon dioxide (CO <sub>2</sub> ).
<b>Unsuitable extinguishing media</b>	Do not use water jet as an extinguisher, as this will spread the fire.
<b>Specific hazards arising from the chemical</b>	During fire, gases hazardous to health may be formed.
<b>Special protective equipment and precautions for firefighters</b>	Self-contained breathing apparatus and full protective clothing must be worn in case of fire.
<b>Fire fighting equipment/instructions</b>	Use water spray to cool unopened containers.
<b>Specific methods</b>	Use standard firefighting procedures and consider the hazards of other involved materials.
<b>General fire hazards</b>	This product is not flammable or combustible.

## 6. Accidental release measures

<b>Personal precautions, protective equipment and emergency procedures</b>	Keep unnecessary personnel away. Avoid inhalation of dust from the spilled material. Use a NIOSH/MSHA approved respirator if there is a risk of exposure to dust/fume at levels exceeding the exposure limits. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. For personal protection, see section 8 of the SDS.
<b>Methods and materials for containment and cleaning up</b>	If sweeping of a contaminated area is necessary use a dust suppressant agent which does not react with the product. Collect dust using a vacuum cleaner equipped with HEPA filter. Minimize dust generation and accumulation. Avoid release to the environment. Following product recovery, flush area with water. For waste disposal, see section 13 of the SDS.
<b>Environmental precautions</b>	Avoid discharge into drains, water courses or onto the ground.

## 7. Handling and storage

<b>Precautions for safe handling</b>	Provide appropriate exhaust ventilation at places where dust is formed. Minimize dust generation and accumulation. Avoid breathing dust. Avoid contact with eyes. Avoid contact with water and moisture. Keep away from strong acids. Practice good housekeeping.
<b>Conditions for safe storage, including any incompatibilities</b>	Store in original tightly closed container. Store in a well-ventilated place. Store away from incompatible materials (see Section 10 of the SDS). Becomes hygroscopic at 70-75% relative humidity. Avoid humid or wet conditions as product will cake and become hard.

## 8. Exposure controls/personal protection

<b>Occupational exposure limits</b>	No exposure limits noted for ingredient(s).
<b>Biological limit values</b>	No biological exposure limits noted for the ingredient(s).
<b>Appropriate engineering controls</b>	Ventilation should be sufficient to effectively remove and prevent buildup of any dusts or fumes that may be generated during handling or thermal processing.
<b>Individual protection measures, such as personal protective equipment</b>	
<b>Eye/face protection</b>	Unvented, tight fitting goggles should be worn in dusty areas.
<b>Skin protection</b>	
<b>Hand protection</b>	Wear appropriate chemical resistant gloves.
<b>Other</b>	Wear suitable protective clothing.

<b>Respiratory protection</b>	Use a NIOSH/MSHA approved respirator if there is a risk of exposure to dust/fume at levels exceeding the exposure limits. If engineering controls do not maintain airborne concentrations below recommended exposure limits (where applicable) or to an acceptable level (in countries where exposure limits have not been established), an approved respirator must be worn.
<b>Thermal hazards</b>	Wear appropriate thermal protective clothing, when necessary.
<b>General hygiene considerations</b>	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

<b>Appearance</b>	White crystalline solid
<b>Physical state</b>	Solid.
<b>Form</b>	Crystalline solid.
<b>Color</b>	White.
<b>Odor</b>	Halogen odor
<b>Odor threshold</b>	Not available.
<b>pH</b>	Not available.
<b>Melting point/freezing point</b>	1473.8 °F (801 °C)
<b>Initial boiling point and boiling range</b>	2669 °F (1465 °C) (760 mmHg)
<b>Flash point</b>	Not available.
<b>Evaporation rate</b>	Not available.
<b>Flammability (solid, gas)</b>	Not available.
<b>Upper/lower flammability or explosive limits</b>	
<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.
<b>Vapor pressure</b>	2.4 mm Hg (1376.6 °F (747 °C))
<b>Vapor density</b>	Not available.
<b>Relative density</b>	2.16 (H <sub>2</sub> O = 1)
<b>Solubility(ies)</b>	
<b>Solubility (water)</b>	26.4 %
<b>Partition coefficient (n-octanol/water)</b>	Not available.
<b>Auto-ignition temperature</b>	Not available.
<b>Decomposition temperature</b>	Not available.
<b>Viscosity</b>	Not available.
<b>Other information</b>	
<b>Bulk density</b>	53 - 83 lb/ft <sup>3</sup>
<b>Molecular formula</b>	NaCl
<b>Molecular weight</b>	58.44
<b>pH in aqueous solution</b>	4 - 9

## 10. Stability and reactivity

<b>Reactivity</b>	The product is stable and non-reactive under normal conditions of use, storage and transport.
<b>Chemical stability</b>	Material is stable under normal conditions.
<b>Possibility of hazardous reactions</b>	No dangerous reaction known under conditions of normal use.
<b>Conditions to avoid</b>	Contact with incompatible materials. Avoid dispersal of dust in the air (i.e., clearing dust surfaces with compressed air).
<b>Incompatible materials</b>	Avoid contact with strong acids. Becomes corrosive to metals when wet.

**Hazardous decomposition products** May evolve chlorine gas when in contact with strong acids.

## 11. Toxicological information

### Information on likely routes of exposure

**Inhalation** Inhalation of dusts may cause respiratory irritation.  
**Skin contact** Prolonged or repeated skin contact may cause irritation.  
**Eye contact** Dust in the eyes will cause irritation.  
**Ingestion** Expected to be a low ingestion hazard.

**Symptoms related to the physical, chemical and toxicological characteristics** Eye and skin contact: Exposure may cause temporary irritation, redness, or discomfort. For ingestion, consuming less than a few grams would not be harmful. The following effects were observed after ingesting an excessive quantity: nausea and vomiting, diarrhea, cramps, restlessness, irritability, dehydration, water retention, nose bleed, gastrointestinal tract damage, fever, sweating, sunken eyes, high blood pressure, muscle weakness, dry mouth and nose, shock, cerebral edema (fluid on brain), pulmonary edema (fluid in lungs), blood cell shrinkage, and brain damage (due to dehydration of brain cells). Death is generally due to cardiovascular collapse or CNS damage.

### Information on toxicological effects

**Acute toxicity** In some cases of confirmed hypertension, ingestion may result in elevated blood pressure.

Components	Species	Test Results
Sodium Chloride (CAS 7647-14-5)		
<b>Acute</b>		
<i>Oral</i>		
LD50	Mouse	4000 mg/kg
	Rat	3000 mg/kg
<i>Other</i>		
LD50	Mouse	2602 mg/kg

**Skin corrosion/irritation** Prolonged skin contact may cause temporary irritation.

**Serious eye damage/eye irritation** Dust in the eyes will cause irritation.

### Respiratory or skin sensitization

**Respiratory sensitization** Not available.  
**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.

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

Not listed.

**Reproductive toxicity** This product is not expected to cause reproductive or developmental effects.

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

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

**Aspiration hazard** Due to the physical form of the product it is not an aspiration hazard.

## 12. Ecological information

**Ecotoxicity** The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

Components	Species	Test Results	
Sodium Chloride (CAS 7647-14-5)			
<b>Aquatic</b>			
Crustacea	EC50	Water flea (Daphnia magna)	340.7 - 469.2 mg/l, 48 hours
Fish	LC50	Rainbow trout, donaldson trout (Oncorhynchus mykiss)	4747 - 7824 mg/l, 96 hours

<b>Persistence and degradability</b>	No data is available on the degradability of this product.
<b>Bioaccumulative potential</b>	No data available.
<b>Mobility in soil</b>	No data available.
<b>Other adverse effects</b>	None known.

### 13. Disposal considerations

<b>Disposal instructions</b>	Collect and reclaim or dispose in sealed containers at licensed waste disposal site.
<b>Local disposal regulations</b>	Dispose in accordance with all applicable regulations.
<b>Hazardous waste code</b>	The waste code should be assigned in discussion between the user, the producer and the waste disposal company.
<b>Waste from residues / unused products</b>	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).
<b>Contaminated packaging</b>	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

Not regulated as dangerous goods.

#### IATA

Not regulated as dangerous goods.

#### IMDG

Not regulated as dangerous goods.

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

### 15. Regulatory information

**US federal regulations** All components are on the U.S. EPA TSCA Inventory List. This product is not known to be a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

#### **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)**

Not listed.

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

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

#### **SARA 302 Extremely hazardous substance**

Not listed.

**SARA 311/312 Hazardous chemical** No

#### **SARA 313 (TRI reporting)**

Not regulated.

#### **Other federal regulations**

##### **Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List**

Not regulated.

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

Not regulated.

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

## US state regulations

### US. Massachusetts RTK - Substance List

Not regulated.

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

Not listed.

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

Not listed.

### US. Rhode Island RTK

Not regulated.

### US. California Proposition 65

California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65): This material is not known to contain any chemicals currently listed as carcinogens or reproductive toxins.

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

Not listed.

## 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** 21-August-2014

**Revision date** -

**Version #** 01

**HMIS® ratings**  
Health: 1  
Flammability: 0  
Physical hazard: 0  
Personal protection: A

**Disclaimer** All statements, technical information and recommendations contained herein are, the best of our knowledge, reliable and accurate; however no warranty, either expressed or implied is made with respect thereto, nor will any liability be assumed for damages resultant from the use of the material described.

It is the responsibility of the user to comply with all applicable federal, state and local laws and regulations. It is also the responsibility of the user to maintain a safe workplace. The user should consider the health hazards and safety information provided herein as a guide and should take the necessary steps to instruct employees and to develop work practice procedures to ensure a safe work environment.

This information is not intended as a license to operate under, or a recommendation to practice or infringe upon any patent of this Company or others covering any process, composition of matter or use.

# Safety Data Sheet

## Isoamyl Benzoate for Synthesis

SDS Revision Date:

12/09/2014



### 1. Identification of the substance/mixture and of the company/undertaking

#### 1.1. Product identifier

**Product Identity** Isoamyl Benzoate for Synthesis  
**Alternate Names** Isoamyl Benzoate for Synthesis

#### 1.2. Relevant identified uses of the substance or mixture and uses advised against

**Intended use** Chemical for synthesis  
**Application Method** See Technical Data Sheet.

#### 1.3. Details of the supplier of the safety data sheet

**Company Name** Thermco Products, Inc.  
10 Millpond Drive,  
Unit #10  
Lafayette, NJ 07848

#### Emergency

**Customer Service: Thermco Products, Inc.** 973.300.9100

### 2. Hazard identification of the product

#### 2.1. Classification of the substance or mixture

Combustible Liquid;H227 Combustible Liquid.

#### 2.2. Label elements

Using the Toxicity Data listed in section 11 and 12 the product is labeled as follows.  
H227 Combustible liquid.

#### [Prevention]:

P210 Keep away from heat / sparks / open flames / hot surfaces - No smoking.  
P280 Wear protective gloves / eye protection / face protection.

#### [Response]:

No GHS response statements

#### [Storage]:

P403+235 Store in a well ventilated place. Keep cool.

#### [Disposal]:

P501 Dispose of contents / container in accordance with local / national regulations.

# Safety Data Sheet

## Isoamyl Benzoate for Synthesis

SDS Revision Date:

12/09/2014



### 3. Composition/information on ingredients

This product contains the following substances that present a hazard within the meaning of the relevant State and Federal Hazardous Substances regulations.

Ingredient/Chemical Designations	Weight %	GHS Classification	Notes
ISOPENTYL BENZOATE CAS Number: 0000094-46-2	100	Not classified	[1]

[1] Substance classified with a health or environmental hazard.

[2] Substance with a workplace exposure limit.

[3] PBT-substance or vPvB-substance.

\*The full texts of the phrases are shown in Section 16.

### 4. First aid measures

#### 4.1. Description of first aid measures

<b>General</b>	In all cases of doubt, or when symptoms persist, seek medical attention. Never give anything by mouth to an unconscious person.
<b>Inhalation</b>	Remove to fresh air, keep patient warm and at rest. If breathing is irregular or stopped, give artificial respiration. If unconscious place in the recovery position and obtain immediate medical attention. Give nothing by mouth.
<b>Eyes</b>	Irrigate copiously with clean water for at least 15 minutes, holding the eyelids apart and seek medical attention.
<b>Skin</b>	Remove contaminated clothing. Wash skin thoroughly with soap and water or use a recognized skin cleanser.
<b>Ingestion</b>	If swallowed obtain immediate medical attention. Keep at rest. Do NOT induce vomiting.

#### 4.2. Most important symptoms and effects, both acute and delayed

<b>Overview</b>	No specific symptom data available. See section 2 for further details.
-----------------	---

### 5. Fire-fighting measures

#### 5.1. Extinguishing media

Recommended extinguishing media; alcohol resistant foam, CO<sub>2</sub>, powder, water spray.  
Do not use; water jet.

#### 5.2. Special hazards arising from the substance or mixture

Do not inhale vapors/aerosols. Ensure supply of fresh air in enclosed rooms.

# Safety Data Sheet

## Isoamyl Benzoate for Synthesis

SDS Revision Date:

12/09/2014



Hazardous decomposition: No hazardous decomposition data available.  
Keep away from heat / sparks / open flames / hot surfaces - No smoking.

### 5.3. Advice for fire-fighters

#### Special risks:

Combustible. Vapors heavier than air.  
Forms explosive mixtures with air on intense heating.  
Development of hazardous combustion gases or vapors possible in the event of fire.

#### Special protective equipment for fire fighting:

Do not stay in dangerous zone without self-contained breathing apparatus.  
Do not allow run off water and contaminants from fire fighting to enter drains or water ways.

ERG Guide No. ----

## 6. Accidental release measures

### 6.1. Personal precautions, protective equipment and emergency procedures

Put on appropriate personal protective equipment (see section 8).  
Do not inhale vapors/aerosols. Ensure supply of fresh air in enclosed rooms.

### 6.2. Environmental precautions

Do not allow spills to enter drains or waterways.  
Use good personal hygiene practices. Wash hands before eating, drinking, smoking or using toilet. Promptly remove soiled clothing and wash thoroughly before reuse.

### 6.3. Methods and material for containment and cleaning up

Do not inhale vapors/aerosols. Ensure supply of fresh air in enclosed rooms.  
Take up with liquid-absorbent material (e.g. Chemizorb). Forward for disposal. Clean up affected area.

## 7. Handling and storage

### 7.1. Precautions for safe handling

Store in accordance with the National Fire Protection Association's publication NFPA 30, Flammable and Combustible Liquids Code. 29 CFR 1910.106 applies to the handling, storage, and use of flammable and combustible liquids.

See section 2 for further details. - [Prevention]:

### 7.2. Conditions for safe storage, including any incompatibilities

Handle containers carefully to prevent damage and spillage.

Store in a cool dry area, away from heat, sparks and open flame. Keep containers sealed when not in use. Store out of direct sunlight.

Incompatible materials: Strong oxidizing agents

Tightly closed. At +15C to +25C.

# Safety Data Sheet

## Isoamyl Benzoate for Synthesis

SDS Revision Date:

12/09/2014



See section 2 for further details. - [Storage]:

### 7.3. Specific end use(s)

No data available.

## 8. Exposure controls and personal protection

### 8.1. Control parameters

#### Exposure

CAS No.	Ingredient	Source	Value
0000094-46-2	ISOPENTYL BENZOATE	OSHA	No Established Limit
		ACGIH	No Established Limit
		NIOSH	No Established Limit
		Supplier	No Established Limit

#### Carcinogen Data

CAS No.	Ingredient	Source	Value
0000094-46-2	ISOPENTYL BENZOATE	OSHA	Select Carcinogen: No
		NTP	Known: No; Suspected: No
		IARC	Group 1: No; Group 2a: No; Group 2b: No; Group 3: No; Group 4: No;

### 8.2. Exposure controls

#### Respiratory

If workers are exposed to concentrations above the exposure limit they must use the appropriate, certified respirators.

#### Eyes

Protective safety glasses required

#### Skin

Butyl rubber gloves  
Layer thickness: 0.7 mm  
Breakthrough time: >240 min

#### Engineering Controls

Provide adequate ventilation. Where reasonably practicable this should be achieved by the use of local exhaust ventilation and good general extraction. If these are not sufficient to maintain concentrations of particulates and any vapor below occupational exposure limits suitable respiratory protection must be worn.

#### Other Work Practices

Use good personal hygiene practices. Wash hands before eating, drinking, smoking or using toilet. Promptly remove soiled clothing and wash thoroughly before reuse.

See section 2 for further details. - [Prevention]:

# Safety Data Sheet

## Isoamyl Benzoate for Synthesis

SDS Revision Date:

12/09/2014



### 9. Physical and chemical properties

<b>Appearance</b>	Colorless Liquid
<b>Odor</b>	Almost Odorless
<b>Odor threshold</b>	Not Measured
<b>pH</b>	NA
<b>Melting point / freezing point</b>	NA
<b>Initial boiling point and boiling range</b>	260 C
<b>Flash Point</b>	89 C
<b>Evaporation rate (Ether = 1)</b>	NA
<b>Flammability (solid, gas)</b>	Not Applicable
<b>Upper/lower flammability or explosive limits</b>	<b>Lower Explosive Limit:</b> NA <b>Upper Explosive Limit:</b> NA
<b>Vapor pressure (Pa)</b>	NA
<b>Vapor Density</b>	NA
<b>Density</b>	0.99 g/cm <sup>3</sup> (@20C)
<b>Solubility in Water</b>	Insoluble
<b>Partition coefficient n-octanol/water (Log Kow)</b>	Not Measured
<b>Auto-ignition temperature</b>	NA
<b>Decomposition temperature</b>	NA
<b>Viscosity (cSt)</b>	NA
<b>VOC %</b>	NA
<b>Log Pow</b>	4.15 (experimental) (Lit.)

#### 9.2. Other information

No other relevant information.

### 10. Stability and reactivity

#### 10.1. Reactivity

Hazardous Polymerization will not occur.

#### 10.2. Chemical stability

Stable under normal circumstances.

#### 10.3. Possibility of hazardous reactions

No data available.

#### 10.4. Conditions to avoid

Forms explosive mixtures with air on intense heating.

# Safety Data Sheet

## Isoamyl Benzoate for Synthesis

SDS Revision Date:

12/09/2014



**10.5. Incompatible materials**

Strong Oxidizing agents.

**10.6. Hazardous decomposition products**

No hazardous decomposition data available.

### 11. Toxicological information

**Acute toxicity**

Ingredient	Oral LD50, mg/kg	Skin LD50, mg/kg	Inhalation Vapor LD50, mg/L/4hr	Inhalation Dust/Mist LD50, mg/L/4hr	Inhalation Gas LD50, ppm
ISOPENTYL BENZOATE - (94-46-2)	6330.00, Rat - Category: NA	No data available	No data available	No data available	No data available

Note: When no route specific LD50 data is available for an acute toxin, the converted acute toxicity point estimate was used in the calculation of the product's ATE (Acute Toxicity Estimate).

Classification	Category	Hazard Description
Acute toxicity (oral)	---	Not Applicable
Acute toxicity (dermal)	---	Not Applicable
Acute toxicity (inhalation)	---	Not Applicable
Skin corrosion/irritation	---	Not Applicable
Serious eye damage/irritation	---	Not Applicable
Respiratory sensitization	---	Not Applicable
Skin sensitization	---	Not Applicable
Germ cell mutagenicity	---	Not Applicable
Carcinogenicity	---	Not Applicable
Reproductive toxicity	---	Not Applicable
STOT-single exposure	---	Not Applicable
STOT-repeated exposure	---	Not Applicable
Aspiration hazard	---	Not Applicable

# Safety Data Sheet

## Isoamyl Benzoate for Synthesis

SDS Revision Date:

12/09/2014



### 12. Ecological information

**12.1. Toxicity**

Do not allow product to enter water, wastewater or soil! See Section 3 for chemical specific data.

**Aquatic Ecotoxicity**

Ingredient	96 hr LC50 fish, mg/l	48 hr EC50 crustacea, mg/l	ErC50 algae, mg/l
ISOPENTYL BENZOATE - (94-46-2)	Not Available	Not Available	Not Available

**12.2. Persistence and degradability**

There is no data available on the preparation itself.

**12.3. Bioaccumulative potential**

An appreciable bioaccumulation potential is to be expected (log Po/w >3)

**12.4. Mobility in soil**

No data available.

**12.5. Results of PBT and vPvB assessment**

This product contains no PBT/vPvB chemicals.

**12.6. Other adverse effects**

No data available.

### 13. Disposal considerations

**13.1. Waste treatment methods**

Observe all federal, state and local regulations when disposing of this substance.

### 14. Transport information

	DOT (Domestic Surface Transportation)	IMO / IMDG (Ocean Transportation)	ICAO/IATA
<b>14.1. UN number</b>	Not Applicable	Not Regulated	Not Regulated
<b>14.2. UN proper shipping name</b>	Not Regulated	Not Regulated	Not Regulated
<b>14.3. Transport hazard class(es)</b>	DOT Hazard Class: Not Applicable DOT Label: ---	IMDG: Not Applicable Sub Class: Not Applicable	Air Class: Not Applicable
<b>14.4. Packing group</b>	Not Applicable	Not Applicable	Not Applicable

# Safety Data Sheet

## Isoamyl Benzoate for Synthesis

SDS Revision Date:

12/09/2014



### 14.5. Environmental hazards

**IMDG** Marine Pollutant: No

### 14.6. Special precautions for user

No further information

## 15. Regulatory information

**Regulatory Overview** The regulatory data in Section 15 is not intended to be all-inclusive, only selected regulations are represented.

**Toxic Substance Control Act ( TSCA)** All components of this material are either listed or exempt from listing on the TSCA Inventory.

**WHMIS Classification** B3

### US EPA Tier II Hazards

**Fire:** Yes

**Sudden Release of Pressure:** No

**Reactive:** No

**Immediate (Acute):** No

**Delayed (Chronic):** No

**EPCRA 311/312 Chemicals and RQs:**  
(No Product Ingredients Listed)

**EPCRA 302 Extremely Hazardous :**  
(No Product Ingredients Listed)

**EPCRA 313 Toxic Chemicals:**  
(No Product Ingredients Listed)

**Proposition 65 - Carcinogens (>0.0%):**  
(No Product Ingredients Listed)

**Proposition 65 - Developmental Toxins (>0.0%):**  
(No Product Ingredients Listed)

**Proposition 65 - Female Repro Toxins (>0.0%):**  
(No Product Ingredients Listed)

**Proposition 65 - Male Repro Toxins (>0.0%):**  
(No Product Ingredients Listed)

**N.J. RTK Substances (>1%) :**  
(No Product Ingredients Listed)

**Penn RTK Substances (>1%) :**  
(No Product Ingredients Listed)

**Safety Data Sheet**  
**Isoamyl Benzoate for Synthesis**

SDS Revision Date:

12/09/2014



**16. Other information**

The information and recommendations contained herein are based upon data believed to be correct. However, no guarantee or warranty of any kind, expressed or implied, is made with respect to the information contained herein. We accept no responsibility and disclaim all liability for any harmful effects which may be caused by exposure to our products. Customers/users of this product must comply with all applicable health and safety laws, regulations, and orders.

The full text of the phrases appearing in section 3 is: not applicable

**This is the first version in the GHS SDS format. Listings of changes from previous versions in other formats are not applicable.**

Disclaimer: This information provided on this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text.

End of Document

## Safety Data Sheet acc. to ISO/DIS 11014

Printing date 06/05/2012

Reviewed on 06/05/2012

### 1 Identification of the substance/mixture and of the company/undertaking

- **Product identifier**
- **Trade name:** Start Right
- **Article number:** NL064E
- **Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**  
United Pet Group  
3001 Commerce Street  
Blacksburg, VA 24060-6671  
USA
- **Information department:** For information call: 800-342-3449
- **Emergency telephone number:** Chemtrec: 800-424-9300

### 2 Hazards identification

- **Classification of the substance or mixture**



H319 Causes serious eye irritation.

- **Classification according to Directive 67/548/EEC or Directive 1999/45/EC** Not applicable.
- **Information concerning particular hazards for human and environment:**  
The product does not have to be labelled due to the calculation procedure of international guidelines.
- **Classification system:**  
The classification was made according to the latest editions of international substances lists, and expanded upon from company and literature data.

- **Label elements**

- **Labelling according to EU guidelines:**  
Observe the general safety regulations when handling chemicals.  
The product is not subject to identification regulations according to directives on hazardous materials.

- **Classification system:**
- **NFPA ratings (scale 0 - 4)**



- **HMIS-ratings (scale 0 - 4)**



- **Other hazards**
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.

USA

(Contd. on page 2)

# Safety Data Sheet

acc. to ISO/DIS 11014

Printing date 06/05/2012

Reviewed on 06/05/2012

Trade name: Start Right

(Contd. of page 1)

### 3 Composition/information on ingredients

- **Chemical characterization: Mixtures**
- **Description:** Mixture of the substances listed below with nonhazardous additions.

- **Dangerous components:**

7772-98-7	Sodium Thiosulphate	⚠ H319	10-<20%
-----------	---------------------	--------	---------

### 4 First aid measures

- **Description of first aid measures**
- **General information:** No special measures required.
- **After inhalation:** Supply fresh air; consult doctor in case of complaints.
- **After skin contact:** Generally the product does not irritate the skin.
- **After eye contact:** Rinse opened eye for several minutes under running water.
- **After swallowing:** If symptoms persist consult doctor.
- **Information for doctor:**
- **Most important symptoms and effects, both acute and delayed** No further relevant information available.
- **Indication of any immediate medical attention and special treatment needed**  
No further relevant information available.

### 5 Firefighting measures

- **Extinguishing media**
- **Suitable extinguishing agents:**  
CO<sub>2</sub>, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- **Special hazards arising from the substance or mixture** No further relevant information available.
- **Advice for firefighters**
- **Protective equipment:** No special measures required.

### 6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures** Not required.
- **Environmental precautions:**  
Dilute with plenty of water.  
Do not allow to enter sewers/ surface or ground water.
- **Methods and material for containment and cleaning up:**  
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
- **Reference to other sections**  
No dangerous substances are released.  
See Section 7 for information on safe handling.  
See Section 8 for information on personal protection equipment.  
See Section 13 for disposal information.

### 7 Handling and storage

- **Handling:**
- **Precautions for safe handling** No special measures required.
- **Information about protection against explosions and fires:** No special measures required.

(Contd. on page 3)

USA

## Safety Data Sheet

acc. to ISO/DIS 11014

Printing date 06/05/2012

Reviewed on 06/05/2012

Trade name: Start Right

(Contd. of page 2)

- **Conditions for safe storage, including any incompatibilities**
- **Storage:**
- **Requirements to be met by storerooms and receptacles:** No special requirements.
- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:** None.
- **Specific end use(s)** No further relevant information available.

### 8 Exposure controls/personal protection

- **Additional information about design of technical systems:** No further data; see item 7.
- **Control parameters**
- **Components with limit values that require monitoring at the workplace:**  
The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.
- **Additional information:** The lists that were valid during the creation were used as basis.
- **Exposure controls**
- **Personal protective equipment:**
- **General protective and hygienic measures:**  
The usual precautionary measures for handling chemicals should be followed.
- **Breathing equipment:** Not required.
- **Protection of hands:**  
The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.  
Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.  
Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation
- **Material of gloves**  
The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.
- **Penetration time of glove material**  
The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.
- **Eye protection:** Goggles recommended during refilling.

### 9 Physical and chemical properties

- **Information on basic physical and chemical properties**
- **General Information**
- **Appearance:**

<b>Form:</b>	Fluid
<b>Color:</b>	According to product specification
<b>Odor:</b>	Characteristic
<b>Odour threshold:</b>	Not determined.
- **pH-value at 20°C (68 °F):** 7
- **Change in condition**

<b>Melting point/Melting range:</b>	Undetermined.
<b>Boiling point/Boiling range:</b>	Undetermined.
- **Flash point:** Not applicable.

(Contd. on page 4)

- USA

## Safety Data Sheet

acc. to ISO/DIS 11014

Printing date 06/05/2012

Reviewed on 06/05/2012

Trade name: Start Right

(Contd. of page 3)

· <b>Flammability (solid, gaseous):</b>	Not applicable.
· <b>Ignition temperature:</b>	
<b>Decomposition temperature:</b>	Not determined.
· <b>Auto igniting:</b>	Product is not selfigniting.
· <b>Danger of explosion:</b>	Product does not present an explosion hazard.
· <b>Explosion limits:</b>	
<b>Lower:</b>	Not determined.
<b>Upper:</b>	Not determined.
· <b>Vapor pressure:</b>	Not determined.
· <b>Density at 20°C (68 °F):</b>	1 g/cm <sup>3</sup> (8.345 lbs/gal)
· <b>Relative density</b>	Not determined.
· <b>Vapour density</b>	Not determined.
· <b>Evaporation rate</b>	Not determined.
· <b>Solubility in / Miscibility with Water:</b>	Fully miscible.
· <b>Segregation coefficient (n-octanol/water):</b>	Not determined.
· <b>Viscosity:</b>	
<b>Dynamic:</b>	Not determined.
<b>Kinematic:</b>	Not determined.
· <b>Solvent content:</b>	
<b>Organic solvents:</b>	0.0 %
<b>Solids content:</b>	0.1 %
· <b>Other information</b>	No further relevant information available.

### 10 Stability and reactivity

- **Reactivity**
- **Chemical stability**
- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **Possibility of hazardous reactions** No dangerous reactions known.
- **Conditions to avoid** No further relevant information available.
- **Incompatible materials:** No further relevant information available.
- **Hazardous decomposition products:** No dangerous decomposition products known.

### 11 Toxicological information

- **Information on toxicological effects**
- **Acute toxicity:**
- **Primary irritant effect:**
- **on the skin:** No irritant effect.
- **on the eye:** No irritating effect.
- **Sensitization:** No sensitizing effects known.

(Contd. on page 5)

USA

# Safety Data Sheet

acc. to ISO/DIS 11014

Printing date 06/05/2012

Reviewed on 06/05/2012

Trade name: Start Right

(Contd. of page 4)

- **Additional toxicological information:**

The product is not subject to classification according to internally approved calculation methods for preparations:

When used and handled according to specifications, the product does not have any harmful effects according to our experience and the information provided to us.

- **Carcinogenic categories**

- **IARC (International Agency for Research on Cancer)**

9003-39-8 Polyvinylpyrrolidone	3
--------------------------------	---

- **NTP (National Toxicology Program)**

None of the ingredients is listed.

## 12 Ecological information

- **Toxicity**

- **Aquatic toxicity:** No further relevant information available.

- **Persistence and degradability** No further relevant information available.

- **Behavior in environmental systems:**

- **Bioaccumulative potential** No further relevant information available.

- **Mobility in soil** No further relevant information available.

- **Additional ecological information:**

- **General notes:**

Water hazard class 1 (Self-assessment): slightly hazardous for water

Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

- **Results of PBT and vPvB assessment**

- **PBT:** Not applicable.

- **vPvB:** Not applicable.

- **Other adverse effects** No further relevant information available.

## 13 Disposal considerations

- **Waste treatment methods**

- **Recommendation:** Smaller quantities can be disposed of with household waste.

- **Uncleaned packagings:**

- **Recommendation:** Disposal must be made according to official regulations.

- **Recommended cleansing agent:** Water, if necessary with cleansing agents.

## 14 Transport information

- **UN-Number**

- **DOT, ADR, ADN, IMDG, IATA** Void

- **UN proper shipping name**

- **DOT, ADR, ADN, IMDG, IATA** Void

- **Transport hazard class(es)**

- **DOT, ADR, ADN, IMDG, IATA**

- **Class** Void

(Contd. on page 6)

USA

**Safety Data Sheet**  
acc. to ISO/DIS 11014

Printing date 06/05/2012

Reviewed on 06/05/2012

Trade name: Start Right

(Contd. of page 5)

- |  |                 |
|--|-----------------|
| · <b>Packing group</b>   |                 |
| · <b>DOT, ADR, IMDG, IATA</b>  | Void            |
| · <b>Environmental hazards:</b>  |                 |
| · <b>Marine pollutant:</b>   | No              |
| · <b>Special precautions for user</b>  | Not applicable. |
| · <b>Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code</b> | Not applicable. |
| · <b>UN "Model Regulation":</b>  | -               |

### 15 Regulatory information

- Safety, health and environmental regulations/legislation specific for the substance or mixture
- Sara

· **Section 355 (extremely hazardous substances):**

None of the ingredients is listed.

· **Section 313 (Specific toxic chemical listings):**

None of the ingredients is listed.

· **TSCA (Toxic Substances Control Act):**

7772-98-7	Sodium Thiosulphate
7647-14-5	Sodium Chloride
9003-39-8	Polyvinylpyrrolidone
497-19-8	Sodium Carbonate
111-30-8	Glutaral

· **Proposition 65**

· **Chemicals known to cause cancer:**

None of the ingredients is listed.

· **Chemicals known to cause reproductive toxicity for females:**

None of the ingredients is listed.

· **Chemicals known to cause reproductive toxicity for males:**

None of the ingredients is listed.

· **Chemicals known to cause developmental toxicity:**

None of the ingredients is listed.

· **Carcinogenic categories**

· **EPA (Environmental Protection Agency)**

None of the ingredients is listed.

· **TLV (Threshold Limit Value established by ACGIH)**

111-30-8 | Glutaral

A4

· **NIOSH-Ca (National Institute for Occupational Safety and Health)**

None of the ingredients is listed.

· **OSHA-Ca (Occupational Safety & Health Administration)**

None of the ingredients is listed.

(Contd. on page 7)

- USA

## Safety Data Sheet

acc. to ISO/DIS 11014

Printing date 06/05/2012

Reviewed on 06/05/2012

**Trade name: Start Right**

(Contd. of page 6)

- **Product related hazard informations:**  
*Observe the general safety regulations when handling chemicals.  
The product is not subject to identification regulations according to directives on hazardous materials.*
- **Chemical safety assessment:** *A Chemical Safety Assessment has not been carried out.*

### 16 Other information

*This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.*

- **Department issuing MSDS:** *Product safety department.*
- **Contact:** *Dr. Schobert*
- **Abbreviations and acronyms:**  
*ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)*  
*IMDG: International Maritime Code for Dangerous Goods*  
*DOT: US Department of Transportation*  
*IATA: International Air Transport Association*  
*ACGIH: American Conference of Governmental Industrial Hygienists*  
*NFPA: National Fire Protection Association (USA)*  
*HMIS: Hazardous Materials Identification System (USA)*

USA