



80 Northwest Boulevard • Nashua, NH 03063
 Tel: 603-889-8899 • Fax: 603-880-6520
www.deltaeducation.com

Dear Educator,

This file contains the Safety Data Sheets (SDS) for FOSS INSECTS AND PLANTS, 3rd 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>

Part Number to Search	Item Description
160-9200	Plant fertilizer, liquid
201-1217-0	Thermometer

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

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

Schultz® Liquid Plant Food – All Analyses

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Revision Date: 11/12/2014 Date of issue: 07/31/2015

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE

1.1. Product Identifier

Product Form: Mixture

Product Name: Schultz Liquid Plant Food -- All Analyses

1.2. Intended Use of the Product

Use of the substance/mixture: Fertilizer

1.3. Details of the Supplier of the Safety Data Sheet

Knox Fertilizer Company, Inc.

P.O. Box 248

Knox, IN 46534

TEL: 574-772-6275

1.4. Emergency Telephone Number

Emergency Number: CHEMTREC 1-800-424-9300

SECTION 2: HAZARDS IDENTIFICATION

2.1. Classification of the Substance or Mixture

Classification (GHS-US)

Acute Tox. 4 (Oral)	H302
Skin Irrit. 2	H315
Eye Irrit. 2B	H320
STOT SE 3	H335
Aquatic Acute 2	H401
Aquatic Chronic 3	H412

2.2. Label Elements

GHS-US Labeling

Hazard Pictograms (GHS-US):



Signal Word (GHS-US)

: Warning

Hazard Statements (GHS-US)

: H302 - Harmful if swallowed
H315 - Causes skin irritation
H320 - Causes serious eye irritation
H335 - May cause respiratory irritation
H401 - Toxic to aquatic life
H412 - Harmful to aquatic life with long lasting effects

Precautionary Statements (GHS-US)

: P261 - Avoid breathing dust/fume/gas/mist/vapors/spray
P264 - Wash hands thoroughly after handling
P270 - Do not eat, drink or smoke when using this product.
P271 - Use only outdoors or in a well-ventilated area
P272 - Contaminated work clothing should not be allowed out of the workplace
P273 - Avoid release to the environment
P280 - Wear eye protection, protective gloves, protective clothing
P302+P352 - IF ON SKIN: Wash with plenty of water
P304+P340 - IF INHALED: Remove person to fresh air and keep comfortable for breathing

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P301+P312 - IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.
P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P312 - Call a poison center/doctor if you feel unwell
P321 - Specific treatment (see Section 4 on this label)
P330 - Rinse mouth.
P332+P313 - If skin irritation occurs: Get medical advice/attention
P333+P313 - If skin irritation or rash occurs: Get medical advice/attention
P337+P313 - If eye irritation persists: Get medical advice/attention
P362 - Take off contaminated clothing and wash before reuse
P362+P364 - Take off contaminated clothing and wash it before reuse
P403+P233 - Store in a well-ventilated place. Keep container tightly closed
P405 - Store locked up
P501 - Dispose of contents/container according to local, regional, national, and international regulations

2.3. Other Hazards

Other Hazards: No additional information available

2.4. Unknown Acute Toxicity (GHS-US)

No data available

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1. Substance

Not applicable

3.2. Mixture (Exact percentages of ingredients are being withheld as a trade secret)

Name	Product identifier	%	Classification (GHS-US)
Urea	(CAS No) 57-13-6	0.0 - 100	Skin Irrit. 2, H315 Eye Irrit. 2B, H320
Potassium Nitrate	(CAS No) 7757-79-1	0.0 - 100	Eye Irrit. 2B, H320
Monopotassium Phosphate	(CAS No) 7778-77-0	0.0 - 100	Not classified
Monoammonium Phosphate	(CAS No) 7722-76-1	0.0 - 100	Skin Irrit. 2, H315 Eye Irrit. 2B, H320 STOT SE 3, H335
Potassium Tripolyphosphate (KTPP)	(CAS No)	0.0 - 100	Acute Tox. 4 (Oral), H302 Skin Irrit. 2, H315 Eye Irrit. 2B, H320 STOT SE 3, H335
Iron (III) EDTA	(CAS No) 15708-41-5	0.0 - 5	Skin Irrit. 2, H315 Eye Irrit. 2B, H320 STOT SE 3, H335
Manganese EDTA	(CAS No) 15375-84-5	0.0 - 5	Eye Irrit. 2B, H320
Zinc EDTA	(CAS No) 14025-21-9	0.0 - 5	Not Classified

Full text of H-phrases: see section 1

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SECTION 4: FIRST AID MEASURES

4.1. Description of First Aid Measures

First-aid Measures General: If medical advice is needed, have product container or label at hand.

First-aid Measures After Inhalation: If inhaled, remove to fresh air and keep at rest in a position comfortable for breathing. Give oxygen or artificial respiration if necessary. Obtain medical attention if breathing difficulty persists.

First-aid Measures After Skin Contact: Wash skin thoroughly with mild soap and water. Obtain medical attention if irritation develops or persists. Wash contaminated clothing before reuse.

First-aid Measures After Eye Contact: Immediately rinse with water for a prolonged period (at least 15 minutes) while holding the eyelids wide open. Obtain medical attention if irritation develops or persists.

First-aid Measures After Ingestion: If swallowed, do not induce vomiting; seek medical advice immediately and show this container or label.

4.2 Most important symptoms and effects, both acute and delayed

Symptoms/Injuries: Not expected to present a significant hazard under anticipated conditions of normal use.

4.3. Indication of Any Immediate Medical Attention and Special Treatment Needed

If medical advice is needed, have product container or label at hand.

SECTION 5: FIREFIGHTING MEASURES

5.1. Extinguishing Media

Suitable Extinguishing Media: Not considered flammable but will burn at high temperatures. Use extinguishing media appropriate for surrounding fire.

Unsuitable Extinguishing Media: None known.

5.2. Special Hazards Arising From the Substance or Mixture

Fire Hazard: Decomposes above 132 °C (270 °F). Under conditions of fire this material may produce: Ammonia. Nitrogen oxides. Biuret. Cyanuric acid.

Explosion Hazard: May form explosive compounds if mixed with: Calcium hypochlorite. Sodium hypochlorite. Nitrates. Nitric acid. Perchloric acid. Product itself is not explosive but if dust is generated, dust clouds suspended in air can be explosive.

Reactivity: This product as shipped in the form of coarse granules should not contain sufficient dust to present an explosion hazard. Prevent dust accumulation (to minimize explosion hazard).

5.3. Advice for Firefighters

Firefighting Instructions: Not flammable.

Protection During Firefighting: Wear full fire-fighting turn-out gear (full Bunker gear) and respiratory protection (SCBA).

Other information: Do not allow run-off from fire fighting to enter drains or water courses.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal Precautions, Protective Equipment and Emergency Procedures

General Measures: Handle in accordance with good industrial hygiene and safety practice. This material becomes slippery when wet.

6.1.1. For Non-emergency Personnel

Protective Equipment: Wear suitable protective clothing, gloves and eye/face protection.

Emergency Procedures: Collect as any solid. Ventilate area. Evacuate unnecessary personnel.

6.1.2. For Emergency Responders

Protective Equipment: Wear suitable protective clothing, gloves and eye/face protection.

Emergency Procedures: If possible, stop flow of product. Contain and collect as any solid. Ventilate area. Evacuate unnecessary personnel.

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6.2. Environmental Precautions

Avoid release to the environment.

6.3. Methods and Material for Containment and Cleaning Up

Methods for Cleaning Up: Soak up spills with inert solids such as clay or diatomaceous earth as soon as possible. Collect spillage. Do not allow into drains or water courses or dispose of where ground or surface waters may be affected.

6.4. Reference to Other Sections: No additional information available

SECTION 7: HANDLING AND STORAGE

7.1. Precautions for Safe Handling

Precautions for Safe Handling: Handle in accordance with good industrial hygiene and safety procedures. Wear recommended personal protective equipment.

Hygiene Measures: Emergency eye wash fountains should be available in the immediate vicinity of any potential exposure.

7.2. Conditions for Safe Storage, Including Any Incompatibilities

Storage Conditions: Store tightly closed in a dry, cool and well-ventilated place. Protect from moisture.

Prohibitions on mixed storage: Store away from: Ammonium nitrate. Refer to Section 10 on Incompatible Materials.

Special Rules on Packaging: Corrosive to copper and its alloys.

7.3. Specific End Use(s)

Fertilizer.

SECTION 8: EXPOSURE CONTROL/PERSONAL PROTECTION

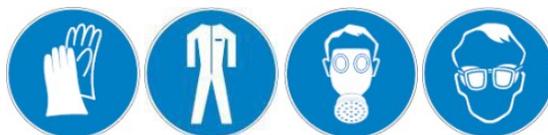
8.1. Control Parameters

No additional information available

8.2. Exposure Controls

Appropriate Engineering Controls: Ensure all national/local regulations are observed.

Personal Protective Equipment: Gloves. Protective clothing. Insufficient ventilation: wear respiratory protection. For particulates and dust: Safety glasses.



Hand Protection: Protective Gloves.

Eye Protection: Safety glasses.

Skin and Body Protection: Wear suitable protective clothing.

Respiratory Protection: If exposure limits are exceeded or irritation is experienced, NIOSH approved respiratory protection should be worn.

Environmental Exposure Controls: Ensure adequate ventilation, especially in confined areas.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on Basic Physical and Chemical Properties

Physical State:	Liquid.
Color:	Light Blue.
Odor:	Characteristic
Odor Threshold	N/A
pH:	N/A
pH solution:	N/A
Relative Evaporation Rate (butylacetate=1):	N/A
Melting Point:	N/A
Freezing Point:	N/A

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Boiling Point:	N/A
Flash Point:	N/A
Auto-ignition Temperature:	No data available
Decomposition Temperature:	No data available
Flammability (solid, gas):	No data available
Vapor Pressure:	N/A
Relative Vapor Density at 20° C:	No data available
Relative Density:	No data available
Density:	No data available
Solubility: Water:	Readily soluble
Partition coefficient: n-octanol/water:	No data available
Viscosity:	N/A

9.2. Other Information No additional information available

SECTION 10: STABILITY AND REACTIVITY

10.1. Reactivity: This product as shipped in the form of fine crystals/granules should not contain sufficient dust to present an explosion hazard. Prevent dust accumulation (to minimize explosion hazard).

10.2. Chemical Stability: Stable at standard temperature and pressure.

10.3. Possibility of Hazardous Reactions: Hazardous polymerization will not occur.

10.4. Conditions to Avoid: Protect from moisture. Keep away from heat.

10.5. Incompatible Materials: May form explosive mixture if in contact with strong acid such as nitric or perchloric acids. Avoid contact with: Strong oxidizers. Strong acids, bases. Nitrates. Hypochlorites. Perchlorates. Chlorides. Corrosive to copper and its alloys.

10.6. Hazardous Decomposition Products: Under conditions of fire this material may produce: Nitrogen oxides. Ammonia. Biuret. Carbon oxides (CO, CO₂). Formaldehyde.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1. Information On Toxicological Effects

Acute Toxicity: Not classified

Monoammonium Phosphate (7722-76-1)	
LD₅₀ Oral Rat	5750 mg/kg
LD₅₀ Dermal Rabbit	>7940 mg/kg
ATE US (Oral)	5750.0000 mg/kg body weight
Monopotassium Phosphate (7778-77-0)	
LD₅₀ Oral Rat	7100 mg/kg
LD₅₀ Dermal Rabbit	>4640 mg/kg
ATE US (Oral)	7100.0000 mg/kg body weight
Potassium Nitrate (7757-79-1)	
LD₅₀ Oral Rat	3750 mg/kg
LD₅₀ Dermal Rat	>5000 mg/kg
ATE US (Oral)	3750.0000 mg/kg body weight
Urea (57-13-6)	
LD₅₀ Oral Rat	8471 mg/kg
LD₅₀ Dermal Rat	>3200 mg/kg
LD₅₀ Dermal Rabbit	>21000 mg/kg
ATE US (Oral)	8471.0000 mg/kg body weight

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Iron (III) EDTA (15708-41-5)	
LD ₅₀ Oral Rat	5000 mg/kg
ATE (Oral)	5000.0000 mg/kg body weight

Ingestion: Harmful if swallowed.

Skin Corrosion/Irritation: Causes skin irritation.

Serious Eye Damage/Irritation: Causes eye irritation.

Skin Sensitization: Causes skin irritation.

Respiratory: May cause respiratory irritation.

Germ Cell Mutagenicity: Not classified

Carcinogenicity: Not classified

Reproductive Toxicity: Not classified.

Specific Target Organ Toxicity (Single Exposure): May cause respiratory irritation.

Specific Target Organ Toxicity (Repeated Exposure): Not classified

Aspiration Hazard: Not classified

Symptoms/Injuries After Inhalation: Overexposure may be irritating to the respiratory system.

Symptoms/Injuries After Skin Contact: May cause skin irritation.

Symptoms/Injuries After Eye Contact: May cause eye irritation.

Symptoms/Injuries After Ingestion: If a large quantity has been ingested: Abdominal pain. Diarrhea. Nausea. Vomiting.

SECTION 12: ECOLOGICAL INFORMATION

12.1. Toxicity

Monoammonium Phosphate (7722-76-1)	
LC ₅₀ Fish 1	155 ppm (Exposure time: 96 h - Species: <i>Pimephales promelas</i>)
Urea (57-13-6)	
LC ₅₀ Fish 1	>6810 mg/l (Exposure time: 96 h - Species: <i>Leuciscus idus</i>)
EC ₅₀ Daphnia 1	> 10000 mg/l (Exposure time: 48 h - Species: <i>Daphnia magna</i>)
LC ₅₀ Fish 2	17500 mg/l (Exposure time: 96 h - Species: <i>Poecilia reticulata</i>)
EC ₅₀ Daphnia 2	> 10000 mg/l (Exposure time: 24 h - Species: <i>Daphnia magna</i>)
Threshold limit other aquatics 1	120000 mg/l (Exposure time: 16 h - Species: <i>Bacteria</i> ; Toxicity Test)
Threshold limit other aquatics 1	>10000 mg/l (Species: <i>Pseudomonas putida</i>)
Threshold limit Algae 1	> 10000 mg/l (Exposure time: 168 h - Species: <i>S. quadricauda</i>)
Potassium Nitrate (7757-79-1)	
LC ₅₀ Fish 1	162 mg/l (Exposure time: 96 h - Species: <i>Pisces sp.</i> ; Lethal)
EC ₅₀ Daphnia 1	39 mg/l (Exposure time: 96 h - Species: <i>Daphnia magna</i>)
LC ₅₀ Fish 2	1378 mg/l (Exposure time: 96 h - Species: <i>Poecilia reticulata</i>)
EC ₅₀ Daphnia 2	490 mg/l (Exposure time: 48 h - Species: <i>Daphnia magna</i>)
Threshold limit Fish 1	3000 mg/l (Exposure time: 96 h - Species: <i>Lepomis macrochirus</i>)
Threshold limit Fish 2	162 mg/l (Exposure time: 96 h - Species: <i>Gambusia affinis</i>)
Monopotassium Phosphate (7778-77-0)	
LC ₅₀ Fish 1	>900 mg/l (Exposure time: 48 h - Species: <i>Leuciscus idus</i>)
EC ₅₀ Other Aquatic Organisms 1	2 ppm (Exposure time: 672 h - Species: <i>Potamogeton sp.</i>)
Threshold Limit Algae 1	1 ppm (Exposure time: 672h - Species: <i>Elodea sp.</i>)

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Iron (III) (15708-41-5)

LC₅₀ Fish 1

2592 mg/l (Exposure time: 96 h - Species: *Pisces*)

12.2. Persistence and Degradability

Schultz Liquid Plant Food – All Analyses

Persistence and Degradability

May cause long-term adverse effects in the environment. This product is water soluble and eventually biodegrades into elemental nitrogen. Excess nitrogen and nitrates in a body of water will contribute to eutrophication with visible effects such as toxic algae bloom.

12.3. Bioaccumulative Potential

Monoammonium Phosphate (7722-76-1)

Bioaccumulative Potential

(no bioaccumulation expected)

Potassium Nitrate (7757-79-1)

Bioaccumulative Potential

Not Established

Urea (57-13-6)

BCF fish 1

< 10

Log Pow

-1.59 (at 25 °C)

Bioaccumulative Potential

Not Established

Monopotassium Phosphate (7778-77-0)

Bioaccumulative Potential

Not Established

12.4. **Mobility in Soil:** No additional information available.

12.5. **Other Adverse Effects:** No additional information available.

SECTION 13: DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods

Sewage Disposal Recommendations: This material is hazardous to the aquatic environment. Keep out of sewers and waterways.

Waste Disposal Recommendations: Place in an appropriate container and dispose of the contaminated material at a licensed site.

Additional Information: Dispose of waste material in accordance with all local, regional, national, and international regulations.

SECTION 14: TRANSPORT INFORMATION

14.1. **In Accordance with DOT:** Not regulated for transport

14.2. **In Accordance with IMDG:** Not regulated for transport

14.3. **In Accordance with IATA:** Not regulated for transport

SECTION 15: REGULATORY INFORMATION

15.1. US Federal Regulations

Schultz Water Soluble Fertilizer – All Analyses

NOT Listed on the United States TSCA (Toxic Substances Control Act) inventory

All components of this product are listed on the United States TSCA (Toxic Substances Control Act) inventory.

This product or mixture does not contain a toxic chemical or chemicals in excess of the applicable *de minimis* concentration as specified in 40 CFR §372.38(a) subject to the reporting requirements of Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372.

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15.2. US State Regulations: No additional information available.

SECTION 16: OTHER INFORMATION

Other Information: This document has been prepared in accordance with the SDS requirements of the OSHA Hazard Communication Standard 29 CFR 1910.1200.

GHS Full Text Phrases:

Acute Tox. 4 (Oral)	Acute toxicity (oral) Category 4
Aquatic Chronic 3	Hazardous to the aquatic environment - Chronic Hazard Category 3
Aquatic Acute 2	Toxic to aquatic environment - Acute Hazard Category 2
Eye Irrit. 2B	Serious eye damage/eye irritation Category 2B
Skin Irrit. 2	Skin corrosion/irritation Category 2
STOT SE 3	Specific target organ toxicity (single exposure) Category 3
H302	Harmful if swallowed
H315	Causes skin irritation
H320	Causes eye irritation
H335	May cause respiratory irritation
H401	Toxic to aquatic life
H412	Harmful to aquatic life with long lasting effects

DISCLAIMER: The information contained in this SDS is based on available data. However, no warranty is expressed or implied regarding the accuracy of this data or the results to be obtained from the use thereof; and you should make your own investigation to determine safety for the use you intend. Knox Fertilizer Company, Inc. makes no warranty of merchantability of fitness for a particular use, nor is there any other express or implied warranty except as may be specifically provided otherwise on the product. Knox Fertilizer Company, Inc. assumes no responsibility or liability for any incidental or consequential damages whether related to personal injury or property damage, to buyers, users or third parties, caused by the product and Knox Fertilizer's responsibility is limited to replacement of, or repayment of, the purchase price for the product with respect to which any damages are claimed. All buyers or users assume all risk with the use of the product.

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
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Emergency

Customer Service: Thermco Products, Inc.	973.300.9100
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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.

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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

General	In all cases of doubt, or when symptoms persist, seek medical attention. Never give anything by mouth to an unconscious person.
Inhalation	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.
Eyes	Irrigate copiously with clean water for at least 15 minutes, holding the eyelids apart and seek medical attention.
Skin	Remove contaminated clothing. Wash skin thoroughly with soap and water or use a recognized skin cleanser.
Ingestion	If swallowed obtain immediate medical attention. Keep at rest. Do NOT induce vomiting.

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

Overview	No specific symptom data available. See section 2 for further details.
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5. Fire-fighting measures

5.1. Extinguishing media

Recommended extinguishing media; alcohol resistant foam, CO₂, 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.

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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.

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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]:

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9. Physical and chemical properties

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

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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

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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
14.1. UN number	Not Applicable	Not Regulated	Not Regulated
14.2. UN proper shipping name	Not Regulated	Not Regulated	Not Regulated
14.3. Transport hazard class(es)	DOT Hazard Class: Not Applicable DOT Label: ---	IMDG: Not Applicable Sub Class: Not Applicable	Air Class: Not Applicable
14.4. Packing group	Not Applicable	Not Applicable	Not Applicable

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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)

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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.

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