

# **SAFETY DATA SHEET**

GHS

United States

# Section 1. Product and company identification

Product name VANLINK® 7 In case of emergency

1-203-853-1400

Supplier/Manufacturer Vanderbilt Chemicals, LLC Chemtrec: 1-800-424-9300

Outside US: +1-703-527-3887

30 Winfield Street +1-703-527-Norwalk, CT 06855

Chemical name Triallyl Isocyanurate

**Synonym** Triallyl-S-triazine-2,4,6 (1H,3H,5H)-trione

50371

Material uses Co-Agent Product type Liquid.

# Section 2. Hazards identification

OSHA/HCS status This material is considered hazardous by the OSHA Hazard Communication Standard

(29 CFR 1910.1200).

Classification of the ACUTE TOXICITY (oral) - Category 4

substance or mixture SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 2

GHS label elements
Hazard pictograms

Code





Signal word Warning

**Hazard statements** Harmful if swallowed.

May cause damage to organs through prolonged or repeated exposure. (liver) (oral)

**Precautionary statements** 

**Prevention** Do not breathe vapor. Do not eat, drink or smoke when using this product. Wash

thoroughly after handling.

**Response** Get medical advice or attention if you feel unwell.

Storage Not applicable.

Disposal Dispose of contents and container in accordance with all local, regional, national and

international regulations.

**Hazards not otherwise** 

classified

None known.

# Section 3. Composition/information on ingredients

Substance/mixture Substance

Ingredient name	CAS number	% by weight
triallyl isocyanurate	1025-15-6	<u>&gt;</u> 99

Occupational exposure limits, if available, are listed in Section 8.

# Section 4. First aid measures

#### **Description of necessary first aid measures**

**Eye contact** Immediately flush eyes with plenty of water, occasionally lifting the upper and lower

eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10

minutes. Get medical attention following exposure or if feeling unwell.

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

not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention following exposure or if feeling unwell. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband. In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for

48 hours.

Skin contact Flush contaminated skin with plenty of water. Remove contaminated clothing and

shoes. Continue to rinse for at least 10 minutes. Get medical attention following exposure or if feeling unwell. Wash clothing before reuse. Clean shoes thoroughly

before reuse.

**Ingestion** Wash out mouth with water. Remove dentures if any. Remove victim to fresh air and

keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention. If necessary, call a poison center or physician. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention

immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt

or waistband.

#### Most important symptoms/effects, acute and delayed

### Potential acute health effects

Eye contactNo known significant effects or critical hazards.InhalationNo known significant effects or critical hazards.Skin contactNo known significant effects or critical hazards.

**Ingestion** Harmful if swallowed.

#### Over-exposure signs/symptoms

Eye contactNo specific data.InhalationNo specific data.Skin contactNo specific data.IngestionNo specific data.

### Indication of immediate medical attention and special treatment needed, if necessary

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## Section 4. First aid measures

**Notes to physician** In case of inhalation of decomposition products in a fire, symptoms may be delayed.

The exposed person may need to be kept under medical surveillance for 48 hours.

**Specific treatments** 

No specific treatment.

**Protection of first-aiders** 

No action shall be taken involving any personal risk or without suitable training. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.

See toxicological information (Section 11)

# Section 5. Fire-fighting measures

#### **Extinguishing media**

Suitable extinguishing

media

**Unsuitable extinguishing** 

media

In case of fire, use water spray (fog), foam, dry chemical or  $CO_2$ .

Do not use water jet.

Specific hazards arising from the chemical

Hazardous thermal

decomposition products

In a fire or if heated, a pressure increase will occur and the container may burst.

Decomposition products may include the following materials: carbon dioxide

carbon monoxide nitrogen oxides

Special protective actions for fire-fighters

Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.

Special protective equipment for fire-fighters

Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

# Section 6. Accidental release measures

### Personal precautions, protective equipment and emergency procedures

For non-emergency

personnel

No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is

inadequate. Put on appropriate personal protective equipment.

For emergency responders

If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

**Environmental precautions** 

Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

### Methods and materials for containment and cleaning up

**Small spill** 

Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

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# Section 6. Accidental release measures

Large spill

Stop leak if without risk. Move containers from spill area. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

# Section 7. Handling and storage

### **Precautions for safe handling**

**Protective measures** 

Put on appropriate personal protective equipment (see Section 8). Do not breathe vapor or mist. Do not ingest. Avoid contact with eyes, skin and clothing. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container.

Advice on general occupational hygiene

Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

Conditions for safe storage, including any incompatibilities

Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.

# Section 8. Exposure controls/personal protection

**Control parameters** 

**Occupational exposure limits** 

None.

Appropriate engineering controls

If user operations generate dust, fumes, gas, vapor or mist, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.

**Environmental exposure controls** 

Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

### **Individual protection measures**

**Hygiene measures** 

Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

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# Section 8. Exposure controls/personal protection

**Eye/face protection** 

Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: safety glasses with sideshields. Recommended: splash goggles

**Skin protection** 

Hand protection Chemical-resistant, impervious gloves complying with an approved standard should be

worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the

protection time of the gloves cannot be accurately estimated.

**Body protection** Personal protective equipment for the body should be selected based on the task being

performed and the risks involved and should be approved by a specialist before

handling this product. Recommended: lab coat

Other skin protection Appropriate footwear and any additional skin protection measures should be selected

based on the task being performed and the risks involved and should be approved by a

specialist before handling this product.

Respiratory protection Based on the hazard and potential for exposure, select a respirator that meets the

appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important

aspects of use.

Personal protective equipment (Pictograms)



# Section 9. Physical and chemical properties

**Appearance** 

Physical state
Color
Yellowish.
Odor
Not available.
PH
Not available.
Not available.

**Melting point** 26 to 28°C (78.8 to 82.4°F)

Boiling point

Flash point

Burning time

Burning rate

Evaporation rate

Flammability (solid, gas)

Lower and upper explosive

Not available.

Not available.

Not available.

Not available.

(flammable) limits

Vapor pressureNot available.Vapor densityNot available.DensityNot available.

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# Section 9. Physical and chemical properties

**Relative density** Not available. **Solubility** Not available. Not available. Solubility in water Partition coefficient: n-Not available.

octanol/water

**Auto-ignition temperature** Not available. **Decomposition temperature** Not available. **SADT** Not available. **Viscosity** Not available.

# Section 10. Stability and reactivity

Reactivity No specific test data related to reactivity available for this product or its ingredients.

**Chemical stability** The product is stable.

**Possibility of hazardous** reactions

Under normal conditions of storage and use, hazardous reactions will not occur.

Conditions to avoid Heat, flames, sparks, ignition sources and contamination.

Incompatible materials Reactive or incompatible with the following materials:

acids

oxidizing agents

**Hazardous decomposition** 

products

Under normal conditions of storage and use, hazardous decomposition products should

not be produced.

# **Section 11. Toxicological information**

#### Information on toxicological effects

#### **Acute toxicity**

Product/ingredient name	Result	Species	Dose	Exposure
triallyl isocyanurate	LD50 Dermal LD50 Oral	Rat Rat	2750 mg/kg 707 mg/kg	-

## Irritation/Corrosion

Not available.

**Conclusion/Summary** 

Skin Triallyl isocyanurate: Non-irritating to the skin. (Rabbit) **Eyes** Triallyl isocyanurate: Non-irritating to the eyes. (Rabbit)

### **Sensitization**

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# **Section 11. Toxicological information**

3	Route of exposure	Species	Result
triallyl isocyanurate	skin	Guinea pig	Not sensitizing

### **Mutagenicity**

Product/ingredient name	Test	Experiment	Result
triallyl isocyanurate	OECD 471	Experiment: In vitro Subject: Bacteria	Negative
	OECD 474	Experiment: In vivo Subject: Mammalian-Animal	Negative

#### **Carcinogenicity**

Not available.

### Reproductive toxicity

Not available.

### **Teratogenicity**

Not available.

#### Specific target organ toxicity (single exposure)

Not available.

### Specific target organ toxicity (repeated exposure)

Name	Category	Route of exposure	Target organs
triallyl isocyanurate	Category 2	oral	liver

# **Aspiration hazard**

Not available.

Information on the likely routes of exposure

Routes of entry anticipated: Inhalation.

# Potential acute health effects

**Eye contact**No known significant effects or critical hazards.
Inhalation
No known significant effects or critical hazards.

**Skin contact** May be harmful in contact with skin.

**Ingestion** Harmful if swallowed.

# Symptoms related to the physical, chemical and toxicological characteristics

Eye contactNo specific data.InhalationNo specific data.Skin contactNo specific data.IngestionNo specific data.

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# **Section 11. Toxicological information**

### Delayed and immediate effects and also chronic effects from short and long term exposure

**Short term exposure** 

**Potential immediate** 

Not available.

effects

Potential delayed effects Not available.

Long term exposure

Potential immediate Not available.

effects

Potential delayed effects Not available.

### Potential chronic health effects

Not available.

General May cause damage to organs through prolonged or repeated exposure if swallowed.

CarcinogenicityNo known significant effects or critical hazards.MutagenicityNo known significant effects or critical hazards.TeratogenicityNo known significant effects or critical hazards.Developmental effectsNo known significant effects or critical hazards.Fertility effectsNo known significant effects or critical hazards.

### **Numerical measures of toxicity**

## **Acute toxicity estimates**

Route	ATE value
	500 mg/kg 2750 mg/kg
Definal	2750 Hig/kg

Other information Not available.

# Section 12. Ecological information

### **Toxicity**

Product/ingredient name	Result	Species	Exposure
triallyl isocyanurate	Acute EC50 >100 mg/l	Algae	72 hours
	Acute EC50 340 mg/l	Daphnia	48 hours
	Acute LC50 >100 mg/l	Fish	96 hours

### Persistence and degradability

Product/ingredient name	Test	Result		Dose		Inoculum
triallyl isocyanurate	OECD 301C	7 % - Not re	eadily - 28 days	-		-
Product/ingredient name	Aquatic half-life		Photolysis		Biodeg	radability
triallyl isocyanurate	-		-		Not rea	idily

## **Bioaccumulative potential**

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# **Section 12. Ecological information**

Product/ingredient name	LogPow	BCF	Potential
triallyl isocyanurate	2.2	-	low

**Mobility in soil** 

Soil/water partition coefficient (Koc)

Not available.

Other adverse effects

No known significant effects or critical hazards.

# Section 13. Disposal considerations

#### **Disposal methods**

The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Disposal should be in accordance with applicable regional, national and local laws and regulations.

# **Section 14. Transport information**

Regulatory information	UN number	Proper shipping name	Classes	PG*	Label	Additional information
<b>DOT Classification</b>	Not regulated.	-	-	-		-
TDG Classification	Not regulated.	-	-	-		-
ADR/RID Class	Not regulated.	-	-	-		-
IMDG Class	Not regulated.	-	-	-		-
IATA-DGR Class	Not regulated.	-	-	-		-

PG\*: Packing group

# Section 15. Regulatory information

**United States Inventory (TSCA 8b)** 

All components are active or exempted.

**U.S. Federal regulations** 

TSCA 8(a) CDR Exempt/Partial exemption: Not determined

#### **SARA 302/304**

#### Composition/information on ingredients

No products were found.

**SARA 304 RQ** Not applicable.

**SARA 311/312** 

Classification ACUTE TOXICITY (oral) - Category 4

SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 2

### Composition/information on ingredients

Name	%	Classification
triallyl isocyanurate		ACUTE TOXICITY (oral) - Category 4 SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 2

#### State regulations

**Massachusetts** None of the components are listed. **New York** None of the components are listed. **New Jersey** None of the components are listed. **Pennsylvania** None of the components are listed. California Prop. 65 None of the components are listed.

### **International regulations**

**Australia Inventory (AIIC)** All components are listed or exempted. **Canada Inventory** All components are listed or exempted. **China Inventory (IECSC)** All components are listed or exempted. **Europe inventory** All components are listed or exempted. **Japan Inventory (CSCL)** All components are listed or exempted. **Korea inventory (KECI)** All components are listed or exempted. **New Zealand Inventory of Chemicals** All components are listed or exempted. (NZIoC) All components are listed or exempted.

**Philippines Inventory (PICCS)** 

**Taiwan Chemical Substances** 

**Inventory (TCSI)** 

All components are listed or exempted.

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# Section 16. Other information

**Hazardous Material Identification System (U.S.A.)** 



Caution: HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. HMIS® ratings are to be used with a fully implemented HMIS® program. HMIS® is a registered trademark and service mark of the American Coatings Association, Inc.

The customer is responsible for determining the PPE code for this material. For more information on HMIS® Personal Protective Equipment (PPE) codes, consult the HMIS® Implementation Manual.

**National Fire Protection Association (U.S.A.)** 



Copyright ©2001, National Fire Protection Association, Quincy, MA 02269. This warning system is intended to be interpreted and applied only by properly trained individuals to identify fire, health and reactivity hazards of chemicals. The user is referred to certain limited number of chemicals with recommended classifications in NFPA 49 and NFPA 325, which would be used as a guideline only. Whether the chemicals are classified by NFPA or not, anyone using the 704 systems to classify chemicals does so at their own risk.

#### **History**

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Version 3

Key to abbreviations

ATE = Acute Toxicity Estimate

BCF = Bioconcentration Factor

GHS = Globally Harmonized System of Classification and Labelling of Chemicals

IATA = International Air Transport Association

IBC = Intermediate Bulk Container

IMDG = International Maritime Dangerous Goods

LogPow = logarithm of the octanol/water partition coefficient

MARPOL = International Convention for the Prevention of Pollution From Ships, 1973

as modified by the Protocol of 1978. ("Marpol" = marine pollution)

UN = United Nations

References Not available.

Information contact Vanderbilt Global Services, LLC

**Corporate Risk Management** 

1-203-295-2143

Visit www.vanderbiltchemicals.com for more information.

#### Notice to reader

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# Section 16. Other information

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