# SAFETY DATA SHEET



#### 1. Identification

**Product identifier** N,N-Diallyl-2-chloroacetamide

Other means of identification

N-12617

**Synonyms ALLIDOCHLOR** 

Recommended use For Laboratory Use Only

**Recommended restrictions** None known.

Manufacturer/Importer/Supplier/Distributor information

Manufacturer

Company name Chem Service. Inc. **Address** 660 Tower Lane

West Chester, PA 19380

**United States** 

Toll Free 800-452-9994 Telephone

610-692-3026 Direct

Website www.chemservice.com E-mail info@chemservice.com

Chemtrec US 800-424-9300 **Emergency phone number** 

Chemtrec outside US +1 703-527-3887

# 2. Hazard(s) identification

Physical hazards Not classified.

**Health hazards** Acute toxicity, oral Category 4

> Acute toxicity, dermal Category 3 Skin corrosion/irritation Category 2 Serious eye damage/eye irritation Category 2 Category 2

**Environmental hazards** Hazardous to the aquatic environment, acute

hazard

Hazardous to the aquatic environment, Category 2

long-term hazard

**OSHA** defined hazards Not classified.

Label elements



Signal word Danger

**Hazard statement** Harmful if swallowed. Toxic in contact with skin. Causes skin irritation. Causes serious eye

irritation. Toxic to aquatic life. Toxic to aquatic life with long lasting effects.

**Precautionary statement** 

Prevention Wash thoroughly after handling. Do not eat, drink or smoke when using this product. Avoid

release to the environment. Wear eye protection/face protection. Wear protective

gloves/protective clothing.

If swallowed: Call a poison center/doctor if you feel unwell. If on skin: Wash with plenty of water. If Response

> in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Call a poison center/doctor if you feel unwell. Rinse mouth. If skin irritation occurs: Get medical advice/attention. If eye irritation persists: Get medical

advice/attention. Take off immediately all contaminated clothing and wash it before reuse. Collect

spillage.

Store locked up. Storage

**Disposal** 

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

Hazard(s) not otherwise classified (HNOC)

None known.

Supplemental information

None.

## 3. Composition/information on ingredients

#### **Substances**

Chemical name	Common name and synonyms	CAS number	%
N,N-Diallyl-2-chloroacetamide	ALLIDOCHLOR	93-71-0	100

<sup>\*</sup>Designates that a specific chemical identity and/or percentage of composition has been withheld as a trade secret.

#### 4. First-aid measures

Inhalation Move to fresh air. Call a physician if symptoms develop or persist.

Take off immediately all contaminated clothing. Wash with plenty of soap and water. Get medical Skin contact

advice/attention if you feel unwell. If skin irritation occurs: Get medical advice/attention. Wash

contaminated clothing before reuse.

**Eve contact** Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if

present and easy to do. Continue rinsing. Get medical attention if irritation develops and persists.

Rinse mouth. If vomiting occurs, keep head low so that stomach content doesn't get into the lungs.

Get medical advice/attention if you feel unwell.

Most important

**General information** 

Ingestion

symptoms/effects, acute and

delayed Indication of immediate

medical attention and special treatment needed

Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred

vision. Skin irritation. May cause redness and pain.

Provide general supportive measures and treat symptomatically. Keep victim warm. Keep victim under observation. Symptoms may be delayed.

Take off immediately all contaminated clothing. Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Show this safety data sheet to

the doctor in attendance.

#### 5. Fire-fighting measures

Suitable extinguishing media

Unsuitable extinguishing media

Specific hazards arising from

the chemical

During fire, gases hazardous to health may be formed.

Special protective equipment

and precautions for firefighters

Water fog. Foam. Dry chemical powder. Carbon dioxide (CO2).

Do not use water jet as an extinguisher, as this will spread the fire.

Fire fighting

equipment/instructions

Specific methods General fire hazards Move containers from fire area if you can do so without risk.

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

Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

No unusual fire or explosion hazards noted.

#### 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

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

Methods and materials for containment and cleaning up This material is classified as a water pollutant under the Clean Water Act and should be prevented from contaminating soil or from entering sewage and drainage systems which lead to waterways.

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

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

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

**Environmental precautions** 

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

## 7. Handling and storage

Precautions for safe handling

Provide adequate ventilation. Avoid contact with eyes, skin, and clothing. Do not taste or swallow. When using, do not eat, drink or smoke. Wear appropriate personal protective equipment. Wash hands thoroughly after handling. Avoid release to the environment. Wash contaminated clothing before reuse. Observe good industrial hygiene practices.

Conditions for safe storage, including any incompatibilities

Store locked up. Store in original tightly closed container. Store away from incompatible materials (see Section 10 of the SDS).

#### 8. Exposure controls/personal protection

Occupational exposure limits

No exposure limits noted for ingredient(s).

Biological limit values

No biological exposure limits noted for the ingredient(s).

Appropriate engineering

controls

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

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

Eye/face protection

Wear safety glasses with side shields (or goggles).

Skin protection

**Hand protection** 

Wear appropriate chemical resistant gloves. Suitable gloves can be recommended by the glove

supplier.

Other

Wear appropriate chemical resistant clothing.

Respiratory protection

In case of insufficient ventilation, wear suitable respiratory equipment.

Thermal hazards

Wear appropriate thermal protective clothing, when necessary.

General hygiene considerations

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

work clothing and protective equipment to remove contaminants.

### 9. Physical and chemical properties

**Appearance** 

Physical stateLiquid.FormLiquidColorAmber

Odor Not available.
Odor threshold Not available.

PH Not available.

Melting point/freezing point Not available.

Initial boiling point and boiling

range

197.6 °F (92 °C) 0.266645 kPa

Flash point Not available.

Evaporation rate Not available.

Flammability (solid, gas) Not applicable.

Upper/lower flammability or explosive limits

Flammability limit - lower

er Not available.

(%)

Flammability limit - upper

(%)

Not available.

Explosive limit - lower (%) Not available.

Explosive limit - upper (%) Not available.

Vapor pressure 0.001 kPa at 20 °C
Vapor density Not available.

Relative density Not available.

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Solubility(ies)

Solubility (water) Not available.

Partition coefficient Not available.
(n-octanol/water)

Auto-ignition temperature Not available.

Decomposition temperature Not available.

Viscosity Not available.

Other information

**Density** 1.0879 g/cm3 estimated at 25 °C

Explosive properties Not explosive.

Molecular formula C8-H12-CI-N-O

Molecular weight 173.64 g/mol

Oxidizing properties Not oxidizing.

Specific gravity 1.09 at 25 °C

## 10. Stability and reactivity

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

Chemical stability Material is stable under normal conditions.

Possibility of hazardous Hazardous polymerization does not occur.

reactions

**Conditions to avoid**Contact with incompatible materials.

Incompatible materials Strong oxidizing agents.

Hazardous decomposition No hazardous de

products

No hazardous decomposition products are known.

# 11. Toxicological information

Information on likely routes of exposure

InhalationNo adverse effects due to inhalation are expected.Skin contactToxic in contact with skin. Causes skin irritation.

**Eye contact** Causes serious eye irritation.

**Ingestion** Harmful if swallowed.

Symptoms related to the physical, chemical and toxicological characteristics

Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred

vision. Skin irritation. May cause redness and pain.

### Information on toxicological effects

Acute toxicity Toxic in contact with skin. Harmful if swallowed.

Product Species Test Results

N,N-Diallyl-2-chloroacetamide (CAS 93-71-0)

<u>Acute</u> Dermal

LD50 Rabbit 830 mg/kg

Oral

LD50 Rat 700 mg/kg

**Skin corrosion/irritation** Causes skin irritation.

Serious eye damage/eye

Causes serious eye irritation.

irritation

Respiratory or skin sensitization

**Respiratory sensitization** Not a respiratory sensitizer.

**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.

<sup>\*</sup> Estimates for product may be based on additional component data not shown.

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

US. 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

Not an aspiration hazard.

## 12. Ecological information

**Ecotoxicity** Toxic to aquatic life with long lasting effects.

Product Species Test Results

N,N-Diallyl-2-chloroacetamide (CAS 93-71-0)

Aquatic

Fish LC50 Rainbow Trout 2 mg/l, 96 hours

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

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

Bioaccumulative potential No data available.

Mobility in soil No data available.

Other adverse effects No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation

potential, endocrine disruption, global warming potential) are expected from this component.

### 13. Disposal considerations

**Disposal instructions**Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Do not allow

this material to drain into sewers/water supplies. Do not contaminate ponds, waterways or ditches

with chemical or used container. Dispose of contents/container in accordance with

local/regional/national/international regulations.

Local disposal regulations

Dispose in accordance with all applicable regulations.

Hazardous waste code

The waste code should be assigned in discussion between the user, the producer and the waste

disposal company.

Waste from residues / unused

products

Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see:

Disposal instructions).

Contaminated packaging Since emptied containers may retain product residue, follow label warnings even after container is

emptied. Empty containers should be taken to an approved waste handling site for recycling or

disposal.

#### 14. Transport information

DOT

UN number UN2810

**UN proper shipping name** 

Toxic, liquids, organic, n.o.s. (N,N-Diallyl-2-chloroacetamide)

Transport hazard class(es)

Class 6.1(PGIII)

Subsidiary risk Label(s) 6.1
Packing group III

**Environmental hazards** 

Marine pollutant Yes

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

Special provisions IB3, T7, TP1, TP28

Packaging exceptions 153
Packaging non bulk 203
Packaging bulk 241

**IATA** 

UN number UN2810

**UN proper shipping name** Toxic liquid, organic, n.o.s. (N,N-Diallyl-2-chloroacetamide)

Material name: N,N-Diallyl-2-chloroacetamide N-12617 Version #: 01 Issue date: 05-22-2015 Transport hazard class(es)

Class 6.1(PGIII)

Subsidiary risk Packing group III
Environmental hazards Yes
ERG Code 6L

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

Other information

Passenger and cargo Allowed.

aircraft

Cargo aircraft only Allowed.

**IMDG** 

UN number UN2810

**UN proper shipping name** TOXIC LIQUID, ORGANIC, N.O.S. (N,N-Diallyl-2-chloroacetamide)

Transport hazard class(es)

Class 6.1(PGIII)

Subsidiary risk Packing group |||

**Environmental hazards** 

Marine pollutant Yes EmS F-A, S-A

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

Not established.

Transport in bulk according to Annex II of MARPOL 73/78 and

the IBC Code

DOT



IATA; IMDG



Marine pollutant



**General information** 

IMDG Regulated Marine Pollutant. DOT Regulated Marine Pollutant.

### 15. Regulatory information

US federal regulations

This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication

Standard, 29 CFR 1910.1200.

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

Not regulated.

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

Not listed.

SARA 304 Emergency release notification

Not regulated.

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not listed

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories Immediate Hazard - Yes

Delayed Hazard - No Fire Hazard - No Pressure Hazard - No Reactivity Hazard - No

SARA 302 Extremely hazardous substance

Not listed.

SARA 311/312 Hazardous

Yes

chemical

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

Not regulated.

(SDWA)

#### **US state regulations**

US. California Controlled Substances. CA Department of Justice (California Health and Safety Code Section 11100)

Not listed.

**US. Massachusetts RTK - Substance List** 

Not regulated.

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

Not regulated.

US. Pennsylvania RTK - Hazardous Substances

Not regulated.

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.

# **International Inventories**

Country(s) or region	Inventory name	On inventory (yes/no)*
Australia	Australian Inventory of Chemical Substances (AICS)	No
Canada	Domestic Substances List (DSL)	No
Canada	Non-Domestic Substances List (NDSL)	Yes
China	Inventory of Existing Chemical Substances in China (IECSC)	No
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	Yes
Europe	European List of Notified Chemical Substances (ELINCS)	No

Country(s) or region Inventory name On inventory (yes/no)\*

Japan Inventory of Existing and New Chemical Substances (ENCS) No

Korea Existing Chemicals List (ECL)

New ZealandNew Zealand InventoryNoPhilippinesPhilippine Inventory of Chemicals and Chemical SubstancesNo

(PICCS)

United States & Puerto Rico Toxic Substances Control Act (TSCA) Inventory Yes

\*A "Yes" indicates that all components of this product comply 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** 05-22-2015

Version # 01

NFPA ratings Health: 3

Flammability: 0 Instability: 0

Disclaimer

The above information is believed to be correct on the date it was last revised and must not be considered all inclusive. The information has been obtained only by a search of available literature and is only a guide for handling the chemicals. OSHA regulations require that if other hazards become evident, an upgraded SDS must be made available to the employee within three months. RESPONSIBILITY for updates lies with the employer and not with CHEM SERVICE, Inc.

Persons not specifically and properly trained should not handle this chemical or its container. This product is furnished FOR LABORATORY USE ONLY! Our products may NOT BE USED as drugs, cosmetics, agricultural or pesticide products, food additives or as household chemicals.

This Safety Data Sheet (SDS) is intended only for use with Chem Service, Inc. products and should not be relied on for use with materials from any other supplier even if the chemical name(s) on the product are identical! Whenever using an SDS for a solution or mixture the user should refer to the SDS for every component of the solution or mixture. Chem Service warrants that this SDS is based upon the most current information available to Chem Service at the time it was last revised. THIS WARRANTY IS EXCLUSIVE, AND CHEM SERVICE, INC. MAKES NO OTHER WARRANTY, EXPRESSED OR IMPLIED, INCLUDING ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR PURPOSE. This SDS is provided gratis and CHEM SERVICE, INC. SHALL NOT BE LIABLE FOR ANY INCIDENTAL, CONSEQUENTIAL OR CONTINGENT DAMAGES.

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Material name: N,N-Diallyl-2-chloroacetamide N-12617 Version #: 01 Issue date: 05-22-2015