

- **-CHLORO-6-CYANO-2-NORBORNANONE-o-(METHYLCARBAMOYL)OXIME Basic information**
- Product Name: 3-CHLORO-6-CYANO-2-NORBORNANONE-o-(METHYLCARBAMOYL)OXIME
- CAS No: 15271-41-7
- Formula:  $C_{10}H_{12}ClN_3O_2$



**CAS number:** 15271-41-7

**Groups:** All Chemicals

**Information:**

**IUPAC Name:** [[[(3S,6S)-3-chloro-6-cyano-norbornan-2-ylidene]amino] N-methylcarbamate

**CAS Number:** 15271-41-7

**Chemical Formula:**  $C_{10}H_{12}ClN_3O_2$

**Synonyms:** 15271-41-7, 2-exo-Chloro-6-endo-cyano-2-norbornanone O-(methylcarbamoyl)oxime, 2-Norbornanecarbonitrile, 5-chloro-6-oxo-, O-(methylcarbamoyl)oxime, (E)-endo-2,exo-5-, 5-Chloro-6-((((methylamino)carbonyl)oxy)imino)bicyclo(2.2.1)heptane-2-carbonitrile, 5-Chloro-6-((((methylamino)carbonyl)oxy)imino)bicyclo(2.2.1)heptane-2-carbonitrile (1S-(1alpha,2beta,4alpha,5alpha,6E))-, Bicyclo(2.2.1)heptane-2-carbonitrile, 5-chloro-6-((((methylamino)carbonyl)oxy)imino)-, (1S-(1alpha,2beta,4alpha,5alpha,6E))-, exo-3-Chloro-endo-6-cyanobicyclo(2.2.1)heptan-2-one syn-(N-methylcarbamoyl)oxime, exo-5-Chloro-6-oxo-endo-2-norbornanecarbonitrile syn-O-(methylcarbamoyl)oxime, HSDB 6447, syn-exo-3-Chloro-endo-6-cyano-2-norbornanone O-(methylcarbamoyl)oxime, TRANID, trans-5-exo-Chloro-6-oxo-2-endo-norbornanecarbonitrile O-(methylcarbamoyl)oxime, UC 2047A, Uc-20047



# BICYCLO[2.2.1]HEPTANE-2-CARBONITRILE, 5-CHLORO-6-[[[(METHYLAMINO)CABONYL]OXY]IMINO]-, [1S-(1ALPHA,2BETA,4ALPHA,5ALPHA,6E)]-

[Chemical Identifiers](#) | [Hazards](#) | [Response Recommendations](#) | [Physical Properties](#) | [Regulatory Information](#) | [Alternate Chemical Names](#)

## Chemical Identifiers

[What is this information?](#) ►

UN/NA Number	CAS Number	CHRIS Code	DOT Hazard Label
none	15271-41-7	none	data unavailable

**NFPA 704:** data unavailable

### General Description

Solid. Used experimentally for residual control of mobile forms of spider mites, including several phosphate resistant strains. Has not been registered. (EPA, 1998)

## Hazards

[What is this information?](#) ►

### Reactivity Alerts

none

### Air & Water Reactions

No rapid reaction with air. No rapid reaction with water.

### Fire Hazard

When heated to decomposition, it emits very toxic fumes of chlorine containing compounds and nitrogen oxides. (EPA, 1998)

### Health Hazard

High oral and dermal toxicity. Carbamates are cholinesterase inhibitors. (EPA, 1998)

### Reactivity Profile

When heated to decomposition, it emits very toxic fumes of chlorine containing compounds and nitrogen oxides. [EPA, 1998].

### Belongs to the Following Reactive Group(s)

[Carbamates](#)

[Nitriles](#)

## Response Recommendations

[What is this information?](#) ►

### Firefighting

A carbamate insecticide. Move container from fire area if you can do so without risk. Fight fire from maximum distance. Dike fire control water for later disposal; do not scatter the material. Keep unnecessary people away; isolate hazard area and deny entry. Stay upwind; keep out of low areas. Ventilate closed spaces before entering them. Wear positive pressure breathing apparatus and special protective clothing. Remove and isolate contaminated clothing at the site.

Extinguish with dry chemical, carbon dioxide, water spray, fog, or foam. (EPA, 1998)

### Non-Fire Response

A carbamate insecticide. Do not touch spilled material; stop leak if you can do so without risk. Use water spray to reduce vapors.

Small spills: absorb with sand or other noncombustible absorbent material and place into containers for later disposal.



Small dry spills: with clean shovel place material into clean, dry container and cover; move containers from spill area.

Large spills: dike far ahead of spill for later disposal. (EPA, 1998)

#### **Protective Clothing**

For emergency situations, wear a positive pressure, pressure-demand, full facepiece self-contained breathing apparatus (SCBA) or pressure- demand supplied air respirator with escape SCBA and a fully-encapsulating, chemical resistant suit. (EPA, 1998)

#### **First Aid**

Note: Tranid is a cholinesterase inhibitor.

Signs and Symptoms of Tranid Exposure: Acute exposure to tranid usually leads to a cholinergic crisis, with signs and symptoms that may include increased salivation, profuse sweating, lacrimation (tearing), runny nose and spontaneous defecation and urination. Pinpoint pupils, blurred vision, headache, tremor, muscle twitching, tightness in chest, malaise, mental confusion, convulsions, and coma may also occur. Gastrointestinal effects include nausea, vomiting, diarrhea, and abdominal pain. Bradycardia (slow heart rate) occurs frequently. Pulmonary edema, dyspnea (shortness of breath), respiratory depression, or respiratory arrest may also occur.

Emergency Life-Support Procedures: Acute exposure to tranid may require decontamination and life support for the victims. Emergency personnel should wear protective clothing appropriate to the type and degree of contamination. Air-purifying or supplied-air respiratory equipment should also be worn, as necessary. Rescue vehicles should carry supplies such as plastic sheeting and disposable plastic bags to assist in preventing spread of contamination.

#### **Inhalation Exposure:**

1. Move victims to fresh air. Emergency personnel should avoid self-exposure to tranid.
2. Evaluate vital signs including pulse and respiratory rate, and note any trauma. If no pulse is detected, provide CPR. If not breathing, provide artificial respiration. If breathing is labored, administer 100% humidified oxygen or other respiratory support.
3. Obtain authorization and/or further instructions from the local hospital for administration of an antidote or performance of other invasive procedures.
4. Transport to a health care facility.

#### **Dermal/Eye Exposure:**

1. Remove victims from exposure. Emergency personnel should avoid self-exposure to tranid.
2. Evaluate vital signs including pulse and respiratory rate, and note any trauma. If no pulse is detected, provide CPR. If not breathing, provide artificial respiration. If breathing is labored, administer 100% humidified oxygen or other respiratory support.
3. Remove contaminated clothing as soon as possible.
4. If eye exposure has occurred, eyes must be flushed with lukewarm water for at least 15 minutes.
5. Wash exposed skin areas twice with soap and water.
6. Obtain authorization and/or further instructions from the local hospital for administration of an antidote or performance of other invasive procedures.
7. Transport to a health care facility.

#### **Ingestion Exposure:**

1. Evaluate vital signs including pulse and respiratory rate, and note any trauma. If no pulse is detected, provide CPR. If not breathing, provide artificial respiration. If breathing is labored, administer 100% humidified oxygen or other respiratory support.
2. Obtain authorization and/or further instructions from the local hospital for administration of an antidote or performance of other invasive procedures.
3. Vomiting may be induced with syrup of Ipecac. If elapsed time since ingestion of tranid is unknown or suspected to be greater than 30 minutes, do not induce vomiting and proceed to Step 4.
4. Ipecac should not be administered to children under 6 months of age. Warning: Ingestion of tranid may result in sudden onset of seizures or loss of consciousness. Syrup of Ipecac should be administered only if victims are alert, have an active gag-reflex, and show no signs of impending seizure or coma. If ANY uncertainty exists, proceed to Step 4.
4. The following dosages of Ipecac are recommended: children up to 1 year old, 10 mL (1/3 oz); children 1 to 12 years old, 15 mL (1/2 oz); adults, 30 mL (1 oz). Ambulate (walk) the victims and give large quantities of water. If vomiting has not occurred after 15 minutes, Ipecac may be readministered. Continue to ambulate and give water to the victims. If vomiting has not occurred within 15 minutes after second administration of Ipecac, administer activated charcoal.



4. Activated charcoal may be administered if victims are conscious and alert. Use 15 to 30 g (1/2 to 1 oz) for children, 50 to 100 g (1-3/4 to 3-1/2 oz) for adults, with 125 to 250 mL (1/2 to 1 cup) of water.
5. Promote excretion by administering a saline cathartic or sorbitol to conscious and alert victims. Children require 15 to 30 g (1/2 to 1 oz) of cathartic; 50 to 100 g (1-3/4 to 3-1/2 oz) is recommended for adults.
6. Transport to a health care facility. (EPA, 1998)

## Physical Properties

[What is this information?](#) ►

**Molecular Formula:** C<sub>10</sub>H<sub>12</sub>CIN<sub>3</sub>O<sub>2</sub>

Flash Point: data unavailable

Lower Explosive Limit: data unavailable

Upper Explosive Limit: data unavailable

Autoignition Temperature: data unavailable

**Melting Point:** 318 to 320 ° F (EPA, 1998)

Vapor Pressure: data unavailable

Vapor Density: data unavailable

Specific Gravity: data unavailable

Boiling Point: data unavailable

**Molecular Weight:** 241.7 (EPA, 1998)

Water Solubility: data unavailable

AEGL: data unavailable

ERPG: data unavailable

### TEEL-1

10.0 mg/m<sup>3</sup>  
(SCAPA, 2008)

IDLH: data unavailable

### TEEL-2

19.0 mg/m<sup>3</sup>

### TEEL-3

19.0 mg/m<sup>3</sup>

## Regulatory Information

[What is this information?](#) ►

**Regulatory Names:** BICYCLO[2.2.1]HEPTANE-2-CARBONITRILE,

**CAA RMP:** Not a regulated chemical.

**CERCLA:** Not a regulated chemical.

**EHS (EPCRA 302):** Regulated chemical with a Reportable Quantity of 500 pounds and a Threshold Planning Quantity of 500/10000 pounds.

**TRI (EPCRA 313):** Not a regulated chemical.

**RCRA Chemical Code:** none

## Alternate Chemical Names

[What is this information?](#) ►

2-EXO-CHLORO-6-ENDO-CYANO-2-NORBORNANONE-O-(METHYLCARBAMOYL)OXIME

2-NORBORNANECARBONITRILE, 5-CHLORO-6-EXO-, O-(METHYLCARBAMOYL)OXIME, (E)-ENDO-2,EXO-5-

2-NORBORNANONE, ENDO-3-CHLORO-EXO-6-CYANO-, O-(METHYLCARBAMOYL)OXIME

3-CHLORO-6- CYANONORBORNANONE-2 OXIME O,N-METHYLCARBAMATE

3-CHLORO-6-CYANO-2-NORBORNANONE-O-(METHYLCARBAMOYL)OXIME



5-CHLORO-6-((((METHYLAMINO) CARBONYL)OXY)IMINO)BICYCLO[2.2.1]HEPTANE-2-CARBONITRILE

BICYCLO[2.2.1]HEPTANE-2-CARBONITRILE,

BICYCLO[2.2.1]HEPTANE-2-CARBONITRILE, 5-CHLORO-6-((((METHYLAMINO)CARBONYL)OXY)IMINO)-, (1S-(1 ALPHA, 2 BETA, 4 ALPHA, 5 ALPHA, 6E))-

BICYCLO[2.2.1]HEPTANE-2-CARBONITRILE, 5-CHLORO-6-[[[(METHYLAMINO)CARBONYL]OXY]IMINO]-, [1S-(1ALPHA,2BETA,4ALPHA,5ALPHA,6E)]-

COMPOUND UC-20047 A

ENDO-3-CHLORO-EXO-6-CYANO-2-NORBORNANONE O-(METHYLCARBAMOYL)OXIME

ENT 25,962

EXO-5-CHLORO-6- OXO-ENDO-2-NORBORNANECARBONITRILE O-(METHYLCARBAMOYL)OXIME

TRANID

UC 20,047A

UC 20047