

# Material Safety Data Sheet

## NovaClenz

### 1 . Product and company identification

**Common name** : NovaClenz  
**Trade name** : NovaClenz Hand Sanitizer - #IC-210, IC-210S  
**Material uses** : Instant Hand Sanitizer.  
**Supplier/Manufacturer** : Micronova Manufacturing Inc.  
 3431 West Lomita Boulevard  
 Torrance, CA 90505  
 Tel : (310) 784-6990  
**In case of emergency** : CHEMTREC, U.S. : (800) 424-9300 International: (703) 527-3887

### 2 . Hazards identification

**Physical state** : Liquid.  
**Odor** : Alcohol-like.  
**Color** : Clear.  
**Hazard status** : This material is classified as hazardous under OSHA regulations.  
**Emergency overview** : WARNING !  
 FLAMMABLE LIQUID AND VAPOR. CAUSES EYE IRRITATION. MAY CAUSE SKIN IRRITATION. CONTAINS MATERIAL THAT CAN CAUSE TARGET ORGAN DAMAGE.  
 Keep away from heat, sparks and flame. Avoid exposure - obtain special instructions before use. Do not breathe vapor or mist. Avoid contact with eyes, skin and clothing. Contains material that can cause target organ damage. Use only with adequate ventilation. Keep container tightly closed and sealed until ready for use. Wash thoroughly after handling.

#### Potential acute health effects

**Eyes** : Irritating to eyes.  
**Skin** : Moderately irritating to the skin.  
**Inhalation** : No known significant effects or critical hazards.  
**Ingestion** : No known significant effects or critical hazards.

**Potential chronic health effects** : CARCINOGENIC EFFECTS: Classified A4 (Not classifiable for humans or animals.) by ACGIH [Ethanol].  
 MUTAGENIC EFFECTS: Not available.  
 TERATOGENIC EFFECTS: Not available.

**Medical conditions aggravated by over-exposure** : Pre-existing disorders involving any target organs mentioned in this MSDS as being at risk may be aggravated by over-exposure to this product.

See toxicological information (section 11)

### 3 . Composition/information on ingredients

#### United States

Name	CAS number	%
Ethanol	64-17-5	60 - 70

## 4 . First aid measures

- Eye contact** : Check for and remove any contact lenses. In case of contact with eyes, rinse immediately with plenty of water. Get medical attention if symptoms occur.
- Skin contact** : Wash with soap and water. Get medical attention if symptoms occur.
- Inhalation** : If inhaled, remove to fresh air. If not breathing, give artificial respiration. Get medical attention if symptoms appear.
- Ingestion** : Do not induce vomiting. Never give anything by mouth to an unconscious person. Get medical attention if symptoms appear.
- Notes to physician** : No specific antidote. Medical staff must contact Poison Control Center.

## 5 . Fire-fighting measures

- Flammability of the product** : Flammable.
- Products of combustion** : Decomposition products may include the following materials:  
carbon oxides
- Extinguishing media**
  - Suitable** : Use dry chemical, CO<sub>2</sub>, water spray (fog) or foam.
  - Not suitable** : Do not use water jet.
- Special exposure hazards** : No action shall be taken involving any personal risk or without suitable training. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.  
  
Flammable liquid. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion. Runoff to sewer may create fire or explosion hazard.
- 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.

## 6 . Accidental release measures

- Personal precautions** : 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. Shut off all ignition sources. No flares, smoking or flames in hazard area. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment (see section 8).
- 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 for cleaning up** : 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). Use spark-proof tools and explosion-proof equipment. 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.

## 7 . Handling and storage

### Handling

: Put on appropriate personal protective equipment (see section 8). 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. Do not get in eyes or on skin or clothing. Do not breathe vapor or mist. Do not ingest. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Do not enter storage areas and confined spaces unless adequately ventilated. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Store and use away from heat, sparks, open flame or any other ignition source. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Use non-sparking tools. Take precautionary measures against electrostatic discharges. To avoid fire or explosion, dissipate static electricity during transfer by grounding and bonding containers and equipment before transferring material. Empty containers retain product residue and can be hazardous. Do not reuse container.

### Storage

: Store in accordance with local regulations. Store in a segregated and approved area. 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. Eliminate all ignition sources. Separate from oxidizing materials. 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.

## 8 . Exposure controls/personal protection

### United States

#### Product name

Ethanol

#### Exposure limits

**ACGIH TLV (United States, 1/2006).**

TWA: 1880 mg/m<sup>3</sup> 8 hour(s).

TWA: 1000 ppm 8 hour(s).

**NIOSH REL (United States, 12/2001).**

TWA: 1900 mg/m<sup>3</sup> 10 hour(s).

TWA: 1000 ppm 10 hour(s).

**OSHA PEL (United States, 11/2006).**

TWA: 1900 mg/m<sup>3</sup> 8 hour(s).

TWA: 1000 ppm 8 hour(s).

### Engineering measures

: Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. The engineering controls also need to keep gas, vapor or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment.

### Eyes

: Safety glasses.

### Skin

: Lab coat.

### Respiratory

: A respirator is not needed under normal and intended conditions of use.

### Hands

: Natural rubber (latex).



- HMIS Code/Personal protective equipment** : B
- Personal protection in case of a large spill** : Safety glasses, goggles or face shield. Impervious gloves. Full suit. Boots. Wear NIOSH-approved self-contained breathing apparatus or equivalent and full protective gear.
- Hygiene measures** : Wash hands, forearms and face thoroughly after handling compounds and before eating, smoking and using the lavatory and at the end of the day. Follow good industrial hygiene practice.

## 9 . Physical and chemical properties

- Physical state** : Liquid.
- Flash point** : Closed cup: 18.3°C (64.9°F) [Pensky-Martens.]
- Color** : Clear.
- Odor** : Alcohol-like.
- pH** : 7
- Boiling/condensation point** : 77.78°C (172°F)
- Relative density** : 0.89
- Volatility** : 90% (w/w)
- Evaporation rate** : >1 (Water = 1 = 1)
- VOC** : 90 (%)
- Solubility** : Easily soluble in the following materials: cold water and hot water.

## 10 . Stability and reactivity

- Stability and reactivity** : The product is stable.
- Incompatibility with various substances** : Reactive or incompatible with the following materials: oxidizing materials, acids and alkalis.
- Hazardous decomposition products** : Under normal conditions of storage and use, hazardous decomposition products should not be produced.
- Hazardous polymerization** : Will not occur.
- Conditions of reactivity** : Highly flammable in the presence of the following materials or conditions: open flames, sparks and static discharge.  
Flammable in the presence of the following materials or conditions: heat.  
Not available.

## 11 . Toxicological information

### Toxicity data

Product/ingredient name	Test / Route	Species	Result
Ethanol	LD50 Intra-arterial	Rat	11 mg/kg
	LD50 Intraperitoneal	Rat	3600 ug/kg
	LD50 Intravenous	Rat	1440 mg/kg
	LD50 Oral	Rat	7060 mg/kg
	LD50 Oral	Rat	7 g/kg

### Acute Effects

- Eyes** : Irritating to eyes.
- Skin** : Moderately irritating to the skin.
- Inhalation** : No known significant effects or critical hazards.
- Ingestion** : No known significant effects or critical hazards.

- Potential chronic health effects** : CARCINOGENIC EFFECTS: Classified A4 (Not classifiable for humans or animals.) by ACGIH [Ethanol].  
 MUTAGENIC EFFECTS: Not available.  
 TERATOGENIC EFFECTS: Not available.
- Target organs** : Contains material which causes damage to the following organs: blood, the reproductive system, liver, upper respiratory tract, skin, central nervous system (CNS), eye, lens or cornea.

## 12 . Ecological information

### Ecotoxicity data

Product/ingredient name	Species	Test	Exposure	Result
Ethanol	Daphnia	Intoxication	48 hours	Acute EC50 >100 mg/L
	Daphnia	Intoxication	48 hours	Acute EC50 9.3 mg/L
	Daphnia	Physiology	48 hours	Acute EC50 2 mg/L
	Fish	Mortality	96 hours	Acute LC50 13000 mg/L
	Fish	Mortality	96 hours	Acute LC50 >100 mg/L
	Daphnia	Mortality	96 hours	Acute LC50 >100 mg/L

- Environmental precautions** : No known significant effects or critical hazards.
- Products of degradation** : Products of degradation: carbon oxides (CO, CO<sub>2</sub>) and water.

## 13 . Disposal considerations

- Waste disposal** : The generation of waste should be avoided or minimized wherever possible. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. 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. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

## 14 . Transport information

Regulatory information	Proper shipping name	Class	UN number	PG	Label
<b>UN / IMDG / IATA Classification</b>	Consumer commodity	9	ID8000	N/A	Misc
<b>DOT Classification</b>	ORM-D / Consumer commodity	9	ID8000	N/A	Misc

## 15 . Regulatory information

### United States

- HCS Classification** : Flammable liquid  
 Irritating material  
 Target organ effects
- U.S. Federal regulations** : **United States inventory (TSCA 8b):** All components are listed or exempted.  
**SARA 302/304/311/312 extremely hazardous substances:** No products were found.  
**SARA 302/304 emergency planning and notification:** No products were found.  
**SARA 302/304/311/312 hazardous chemicals:** Ethanol  
**SARA 311/312 MSDS distribution - chemical inventory - hazard identification:**  
 Ethanol: Fire hazard, Immediate (acute) health hazard, Delayed (chronic) health hazard  
**Clean Water Act (CWA) 307:** No products were found.

**Clean Water Act (CWA) 311:** No products were found.  
**Clean Air Act (CAA) 112 accidental release prevention:** No products were found.  
**Clean Air Act (CAA) 112 regulated flammable substances:** No products were found.  
**Clean Air Act (CAA) 112 regulated toxic substances:** No products were found.  
**Connecticut Carcinogen Reporting:** None of the components are listed.  
**Connecticut Hazardous Material Survey:** None of the components are listed.  
**Florida substances:** None of the components are listed.  
**Illinois Chemical Safety Act:** None of the components are listed.  
**Illinois Toxic Substances Disclosure to Employee Act:** None of the components are listed.  
**Louisiana Reporting:** None of the components are listed.  
**Louisiana Spill:** None of the components are listed.  
**Massachusetts Spill:** None of the components are listed.  
**Massachusetts Substances:** The following components are listed: Ethanol  
**Michigan Critical Material:** None of the components are listed.  
**Minnesota Hazardous Substances:** None of the components are listed.  
**New Jersey Hazardous Substances:** The following components are listed: Ethanol  
**New Jersey Spill:** None of the components are listed.  
**New Jersey Toxic Catastrophe Prevention Act:** None of the components are listed.  
**New York Acutely Hazardous Substances:** None of the components are listed.  
**New York Toxic Chemical Release Reporting:** None of the components are listed.  
**Pennsylvania RTK Hazardous Substances:** The following components are listed:  
 Ethanol  
**Rhode Island Hazardous Substances:** None of the components are listed.  
**California prop. 65:** No products were found.

**State regulations**

- : **Connecticut Carcinogen Reporting:** None of the components are listed.
- : **Connecticut Hazardous Material Survey:** None of the components are listed.
- : **Florida substances:** None of the components are listed.
- : **Illinois Chemical Safety Act:** None of the components are listed.
- : **Illinois Toxic Substances Disclosure to Employee Act:** None of the components are listed.
- : **Louisiana Reporting:** None of the components are listed.
- : **Louisiana Spill:** None of the components are listed.
- : **Massachusetts Spill:** None of the components are listed.
- : **Massachusetts Substances:** The following components are listed: Ethanol
- : **Michigan Critical Material:** None of the components are listed.
- : **Minnesota Hazardous Substances:** None of the components are listed.
- : **New Jersey Hazardous Substances:** The following components are listed: Ethanol
- : **New Jersey Spill:** None of the components are listed.
- : **New Jersey Toxic Catastrophe Prevention Act:** None of the components are listed.
- : **New York Acutely Hazardous Substances:** None of the components are listed.
- : **New York Toxic Chemical Release Reporting:** None of the components are listed.
- : **Pennsylvania RTK Hazardous Substances:** The following components are listed:  
Ethanol
- : **Rhode Island Hazardous Substances:** None of the components are listed.
- : **California prop. 65:** No products were found.

**International lists**

- : This product, (and its ingredients) is (are) listed on national inventories, or is (are) exempted from being listed, in Australia (AICS), in Europe (EINECS/ELINCS), in Korea (TCCL), in Japan (METI), in the Philippines (RA6969).

**16 . Other information**

**Label requirements (U.S.A.)** : FLAMMABLE LIQUID AND VAPOR. CAUSES EYE IRRITATION. MAY CAUSE SKIN IRRITATION. CONTAINS MATERIAL THAT CAN CAUSE TARGET ORGAN DAMAGE.

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

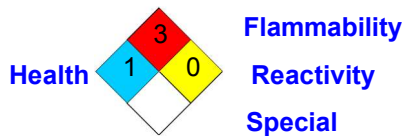
HMIS RATING	
Health	* 1
Fire hazard	3
Physical Hazard	0
Personal protection	B

**HAZARD RATINGS**

- 4- Extreme
- 3- Serious
- 2- Moderate
- 1- Slight
- 0- Minimal

See section 8 for more detailed information on personal protection.

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



**References**

- : ANSI Z400.1, MSDS Standard, 2004. - Manufacturer's Material Safety Data Sheet. - 29CFR Part1910.1200 OSHA MSDS Requirements. - 49CFR Table List of Hazardous Materials, UN#, Proper Shipping Names, PG.

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: 3

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