

Safety Data Sheet  
According to the (US) Hazard Communication Standard (29 CFR 1910.1200)

**SECTION 1: PRODUCT AND COMPANY IDENTIFICATION**

<b>Product Name</b>	Acetone, ACS	
<b>NCL Catalog Number</b>	A-12M	
<b>Product Description</b>	Laboratory chemical	
<b>Manufacturer</b>	EMD Chemicals Inc.	PO Box 70, 480 Democrat Road Gibbstown, NJ 08027
<b>Supplier</b>	NCL of Wisconsin, Inc. Telephone: 1-800-648-7836 Email: <a href="mailto:nclabs@nclabs.com">nclabs@nclabs.com</a>	PO Box 8, Birnamwood, WI 54414 Fax: 715-449-2454 Emergency Contact: 1-800-424-9300 (Chemtrec)

**SECTION 2: HAZARDS IDENTIFICATION**

**Classification of the Substance or Mixture**

**GHS Classification**

Flammable Liquids	Category 2
Eye Irritation	Category 2A
Specific Target Organ Toxicity	Single Exposure Category 3



**Signal Word**

Danger

**Hazard Statements**

H225	Highly flammable liquid and vapor.
H319	Causes serious eye irritation.
H336	May cause drowsiness or dizziness.

**Precautionary Statements**

P210	Keep away from heat, hot surfaces, sparks, open flames, and other ignition sources. No smoking.
P233	Keep container tightly closed.
P240	Ground and bond container and receiving equipment.
P241	Use explosion-proof electrical/ventilating/lighting equipment.
P242	Use non-sparking tools.
P243	Take action to prevent static discharges.
P261	Avoid breathing fume/vapors/spray.
P264	Wash exposed skin thoroughly after handling.
P271	Use only outdoors or in a well-ventilated area.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P303+P361+P353	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
P304+P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P312	Call a POISON CENTER or doctor 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.
P337+P313	If eye irritation persists: Get medical advice/attention.
P370+P378	In case of fire: Use dry sand, dry chemical or alcohol-resistant foam to extinguish.
P403+P235	Store in a well-ventilated place. Keep cool.
P405	Store locked up.
P501	Dispose of contents/container to comply with federal, state, and local regulations.

**Other Hazards Not Contributing to the Classification**

Repeated exposure may cause skin dryness or cracking.

**SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS**

**Substance**

Name	CAS #	Approximate %
Acetone	67-64-1	100

**SECTION 4: FIRST AID MEASURES**

**Description of First Aid Measures**

<b>General First Aid Measures</b>	Never give anything by mouth to an unconscious person. Seek medical advice if you feel unwell.
<b>If Inhaled</b>	Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER or doctor/physician.
<b>In Case of Skin Contact</b>	Remove all contaminated clothing. Rinse skin with water/shower. Immediately call a POISON CENTER or doctor/physician.
<b>In Case of Eye Contact</b>	Rinse carefully with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor/physician.
<b>If Swallowed</b>	Rinse mouth. Do NOT induce vomiting. Immediately call a POISON CENTER or doctor.

**Most Important Symptoms/Effects Acute and Delayed**

<b>After Inhalation</b>	Exposure to high concentrations: Feeling of weakness. Irritation of the respiratory tract. Nausea. Vomiting. Headache. Central nervous system depression. Dizziness. Narcosis. Excited/restless. Drunkenness. Disturbed motor response. Respiratory difficulties. Disturbances of consciousness.
<b>After Skin Contact</b>	Dry skin. Cracking of the skin.
<b>After Eye Contact</b>	Irritation of the eye tissue.
<b>After Ingestion</b>	Dry/sore throat. Risk of aspiration pneumonia. Symptoms similar to those listed under inhalation. After absorption of high quantities: Irritation of the gastric/intestinal mucosa. Change in the haemogramme/blood composition. Change in the urine output. Affection of the renal tissue. Enlargement/affection of the liver.
<b>Chronic Symptoms</b>	Red skin. Skin rash/inflammation. Dry/sore throat. Headache. Nausea. Feeling of weakness. Loss of weight. Possible inflammation of the respiratory tract.

**Indication of Immediate Medical Attention and Special Treatment Needed**

Seek medical attention if exposed.

**SECTION 5: FIRE-FIGHTING MEASURES**

**Extinguishing Media**

<b>Suitable Extinguishing Media</b>	Alcohol resistant foam. Dry powder. Water spray. Polyvalent foam. BC powder. Carbon dioxide.
<b>Unsuitable Extinguishing Media</b>	Do not use a heavy water stream.

**Special Hazards Arising from the Chemical**

Highly flammable. Gas/vapor flammable with air within explosion limits. May be ignited by sparks. Violent to explosive reaction with many compounds. On exposure to light, can release harmful gases/vapors. Reacts violently with strong oxidizers, peroxidation resulting in increased fire or explosion risk.

**Special Protective Actions for Fire-Fighters**

Wear self-contained breathing apparatus and protective clothing. Keep exposed containers cool with water spray.

**SECTION 6: ACCIDENTAL RELEASE MEASURES**

## **Personal Precautions, Protective Equipment and Emergency Procedures**

<b>Personal Precautions</b>	Use personal protective equipment (see section 8). Evacuate area of non-essential personnel. Eliminate ignition sources. Beware of vapors accumulating to form explosive concentrations. Vapors can accumulate in low areas.
<b>Environmental Precautions</b>	Prevent entry to sewers and public waters.
<b>Methods and Materials for Containment and Cleaning Up</b>	Collect spillage with inert absorbent material. Store away from other materials. Wash clothing/equipment after handling. Ensure compliance with federal, state, and local regulations.

## **SECTION 7: HANDLING AND STORAGE**

### **Handling and Storage**

<b>Precautions for Safe Handling</b>	Avoid contact with eyes and skin. Avoid breathing vapors. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Provide good ventilation in process area to prevent formation of vapor.
<b>Conditions for Safe Storage Including any Incompatibilities</b>	Keep in a tightly closed container, stored in a cool, dry, ventilated area. Store away from sunlight, which can contribute to instability. Store away from: strong bases, strong acids, oxidating agents, reducing agents, halogens, and amines.

## **SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION**

### **Control Parameters**

<b>Acetone (67-64-1)</b>		
USA ACGIH	ACGIH TWA (ppm)	500 ppm
USA ACGIH	ACGIH STEL (ppm)	750 ppm
USA OSHA	OSHA PEL (TWA) (mg/m <sup>3</sup> )	2400 mg/m <sup>3</sup>
USA OSHA	OSHA PEL (TWA) (ppm)	1000 ppm

### **Appropriate Engineering Controls**

Material should be handled or transferred in a fume hood or with equivalent ventilation. Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure.

### **Individual Protection Measures**

<b>Skin Protection</b>	Avoid all unnecessary exposure. Butyl-rubber gloves and additional protection including impervious boots, apron, or coveralls, as needed in areas of unusual exposure to prevent skin contact.
<b>Eye Protection</b>	Use chemical safety goggles and /or a full face shield where splashing is possible. Contact lenses should not be worn when working with this material. Maintain eye-wash fountain and quick-drench facilities in work area.
<b>Respiratory Protection</b>	Wear appropriate mask.
<b>Other Information</b>	Do not eat, drink, or smoke during use.

## **SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES**

<b>Physical State</b>	Liquid
<b>Color</b>	Colorless
<b>Odor</b>	Aromatic odor
<b>Odor Threshold</b>	Not determined
<b>pH</b>	Not determined
<b>Melting Point/Freezing Point</b>	-95°C/Not available
<b>Initial Boiling Point and Boiling Range</b>	56°C
<b>Flash Point</b>	-18.0°C
<b>Evaporation Rate</b>	Not determined
<b>Flammability (Solid, Gas)</b>	Not determined
<b>Upper/Lower Flammability/Explosive Limits</b>	13% (V) / 2% (V)
<b>Vapor Pressure</b>	245.3 hPa (184.0 mmHG) at 20.0°C

<b>Vapor Density</b>	Not determined
<b>Relative Density</b>	0.791 g/cm <sup>3</sup> at 25°C
<b>Solubility</b>	Completely miscible
<b>Partition Coefficient: n-octanol/water</b>	Log Pw: -0.24
<b>Auto-Ignition Temperature</b>	465°C
<b>Decomposition Temperature</b>	Not determined
<b>Viscosity</b>	Not determined

#### SECTION 10: STABILITY AND REACTIVITY

<b>Reactivity</b>	No data available.
<b>Chemical Stability</b>	Stable under ordinary conditions of use and storage.
<b>Possibility of Hazardous Reactions</b>	Vapors may form explosive mixture with air.
<b>Conditions to Avoid</b>	Extremely high or low temperatures. Heat and sunlight can contribute to instability.
<b>Incompatible Materials</b>	Bases, oxidizing agents, reducing agents. Acetone reacts violently with phosphorous oxychloride.
<b>Hazardous Decomposition Products</b>	Fumes, carbon monoxide, carbon dioxide.

#### SECTION 11: TOXICOLOGICAL INFORMATION

<b>Acute Toxicity</b>	Not classified
<b>Acetone (67-64-1)</b>	
<b>LD50 oral rat</b>	5800 mg/kg
<b>LD50 dermal rabbit</b>	20000 mg/kg
<b>LC50 inhalation rat (mg/l)</b>	71 mg/l/4h (76 mg/l/4h)
<b>LC50 inhalation rat (ppm)</b>	30000 ppm/4h

<b>Skin Corrosion/Irritation</b>	Not classified
<b>Serious Eye Damage/Irritation</b>	Causes serious eye irritation.
<b>Respiratory or Skin Sensitization</b>	Not classified
<b>Germ Cell Mutagenicity</b>	Not classified
<b>Carcinogenicity</b>	Not classified
<b>Reproductive Toxicity</b>	Not classified
<b>Specific Target Organ Toxicity (Single Exposure)</b>	May cause drowsiness or dizziness.
<b>Specific Target Organ Toxicity (Repeated Exposure)</b>	Not classified
<b>Aspiration Hazard</b>	Not classified
<b>Potential Adverse Human Health Effects and Symptoms</b>	No data available
<b>Symptoms/Injuries After Inhalation</b>	Feeling of weakness. Irritation of the respiratory tract. Nausea. Vomiting. Headache. Central nervous system depression. Dizziness. Narcosis. Excited/restlessness. Drunkenness. Disturbed motor response. Respiratory difficulties. Disturbances of consciousness.
<b>Symptoms/Injuries After Skin Contact</b>	Dry skin. Cracking of the skin.
<b>Symptoms/Injuries After Eye Contact</b>	Irritation of the eye tissue.
<b>Symptoms/Injuries After Ingestion</b>	Dry/sore throat. Risk of aspiration pneumonia. Symptoms similar to those listed under inhalation. Irritation of the gastric/intestinal mucosa. Change in the haemogramme/blood composition. Change in urine output. Affection of the renal tissue. Enlargement/affection of the liver.
<b>Chronic Symptoms</b>	Red skin. Skin rash/inflammation. Dry/sore throat. Headache. Nausea. Feeling of weakness. Loss of weight. Possible inflammation of the respiratory tract.

#### SECTION 12: ECOLOGICAL INFORMATION

**Toxicity**

<b>Acetone (67-64-1)</b>	
LC50 fishes 1	6210 mg/l (96 h; Pimephales promelas)
EC50 Daphnia 1	8800 mg/l (48 h; Daphnia pulex)
LC50 fish 2	5540 mg/l 96 h; Salmo gairdneri (Oncorhynchus mykiss)
TLM fish 1	13000 ppm (96 h: Gambusia affinis)
TLM fish 2	>1000 ppm (96 h: Pisces)
Threshold limit other aquatic organisms 1	3000 mg/l (Plankton)
Threshold limit other aquatic organisms 2	28 mg/l (Protozoa)
Threshold limit algae 1	7500 mg/l (Scenedesmus quadricauda; pH=7)
Threshold limit algae 2	3400 mg/l (48 h; Chlorella sp.)

**Persistence and Degradability** Readily biodegradable in water. Biodegradable in the soil. Biodegradable in the soil under anaerobic conditions. No data on mobility of the substance available.

**Bioaccumulative Potential** Not bioaccumulative.  
BCF fish 1: 0.69 (Pisces)  
BCF other aquatic organisms: 3  
Log Pow: -0.24

**Mobility in Soil** Surface Tension: 0.0237 N/m

**Other Adverse Effects** Avoid release to the environment.

**SECTION 13: DISPOSAL CONSIDERATIONS**

**Methods of Disposal**

**Disposal Recommendations** Dispose of contents/containers in accordance with federal, state, and local regulations.

**Ecology-Waste Materials** Avoid release to the surrounding environment.

**SECTION 14: TRANSPORT INFORMATION**

**UN Number** UN1090  
**UN Shipping Name** Acetone  
**Transport Hazard Class(es)** 3-Flammable liquids  
**Packing Group** II  
**Environmental Hazards** Not applicable  
**Transport in Bulk** Not applicable  
**Special Precautions** Not applicable

**SECTION 15: REGULATORY INFORMATION**

<b>Acetone (67-64-1)</b>	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	
Reportable Quantity	5000 lb

**SECTION 16: OTHER INFORMATION**

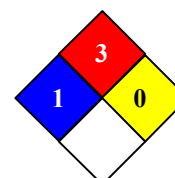
Revision Date: 01/05/2015

**NFPA Hazards**

**Health Hazard** 1: Exposure would cause irritation with only minor residual injury.

**Fire Hazard** 3: Liquids and solids that can be ignited under almost all ambient temperature conditions.

**Reactivity/Instability** 0: Normally stable, even under fire exposure conditions, and is not reactive with water.



**HMIS III Rating**

**Health** 1: Irritation or minor reversible injury possible.  
**Flammability** 3: Materials capable of ignition under almost all normal temperature conditions.  
**Physical Hazard** 0: Materials that are normally stable.  
**Personal Protection** C

A-12M	
Health	1
Flammability	3
Physical Hazard	0
Personal Protection	C

The information contained herein is provided in good faith and is believed to be correct as of the date hereof. However, NCL of Wisconsin, Inc. makes no representation as to the comprehensiveness or accuracy of the information. It is expected that individuals receiving the information will exercise their independent judgment in determining its appropriateness for their conditions of use. Accordingly, NCL of Wisconsin, Inc. will not be responsible for damages of any kind resulting from the use of or reliance upon such information.

---

**END OF SAFETY DATA SHEET**