

# Safety & Health Quick List

Chemical/Product Name:	Acrylonitrile
Synonym:	ACN

CAS No: 107-13-1

Hazard Statements:	H225	Highly flammable liquid and vapor.
	H301	Toxic if swallowed.
	H311	Toxic in contact with skin
	H315	Causes skin irritation.
	H317	May cause allergic skin reaction.
	H318	Causes serious eye damage...
	H331	Toxic if inhaled.
	H335	May cause respiratory irritation.
	H350	May cause cancer.
	H361d	Suspected of damaging the unborn child.
	H411	Toxic to aquatic life with long lasting effects.

NFPA Ratings:	4-Dangerous	3-Severe	2-Moderate	1-Slightly Hazardous
GHS Ratings:	1-Dangerous	2-Severe	3-Moderate	4-Slightly Hazardous

### Physical Properties

NFPA Rating: Health	4	Auto Ignition Temperature	897.8 F
NFPA Rating: Flammability	3	Solubility in Water	7.45x10 <sup>4</sup> mg/l
NFPA Rating: Reactivity	2	Specific Gravity	0.806
GHS Classification: Flammable	2	Flash Point	32 F
GHS Classification: Health Hazard	1B	Vapor Pressure	1.668 psi
GHS Classification: Corrosive	1	Max Concentration	99.40%
GHS Classification: Harmful	1	Boiling Point	171.14 F
Fire Extinguisher Type	Use water spray, dry chemical or carbon dioxide	RQ	100 lbs
Freeze Point	182.3 F		
LEL%	3%		
UEL%	17%		
Vapor Density	1.83		

### Exposure Guidelines

PEL/TLV	2 ppm	Corrosive	2
STEL	10 ppm	Irritant	2
Ceiling	N/A	IDLH	85 ppm
Skin Notation (S)	2	Odor Threshold	21.4 ppm
Carcinogen	1B	Sensitizer	1

### Other Hazards:

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### Emergency Response

EPRG-1	10 ppm	Isolate area for at least 50 meters (150 feet) in all directions
EPRG-2	35 ppm	Consider initial downwind evacuation for at least 300 meters (1000 feet).
EPRG-3	75 ppm	Isolate for 800 meters (1/2 mile) in all directions
Monitoring Method	Personal Workplace atmosphere or biological monitoring.	

**Normal Tasks**

	<b>PPE Group</b>
Sampling	Group 9
Drum/Tote Filling	N/A
Strapping Tank/Truck	Group 9
Hose Disconnect Unclear (Camlock Fitting)	Group 9
Hose Disconnect Unclear (Dry Disconnect)	Group 9
Line/Equipment Opening Unclear	Group 9
Line/Equipment Opening Clear	Group 9
Contaminated Equipment in Maintenance Shop which can't be cleaned	Group 9
Tank Cleaning (No Chemicals Present)	Group 9
Tank Cleaning (Chemicals Present)	Group 9

**Emergency Response Tasks**

	<b>PPE Group</b>
Small Spill	Group 9
Medium Spill	Group 9
Large Spill	Group 9
Downwind Monitoring (Vapor Only)	Group 9
Liquid Contact (HAZMAT)	Group 9

**Lab Handling**

	<b>PPE Group</b>
Inside Hood	Group 13
Outside Hood	Group 13

NUMBER	KEY CODE	DESCRIPTION
<b>GROUP 2</b>	GENERAL PROCESS AREA	Standard PPE - Hard Hat, Nomex Coveralls, Safety Side-Shield Glasses, Work Gloves (Leather)
<b>GROUP 9</b>	TYCHEM SUIT	Standard PPE (Group 2) with Chemical Gloves, Boots, Tychem Suit, and the Required Respirator
<b>GROUP 11</b>	STANDARD LAB -L	Nomex Lab Coat, Safety Side-Shield Glasses, Latex Gloves
<b>GROUP 12</b>	STANDARD LAB -N	Nomex Lab Coat, Safety Side-Shield Glasses, Nitrile Gloves
<b>GROUP 13</b>	LAB & RESPIRATOR	Group 11 or 12 along with a Cartridge Respirator
<b>GROUP 14</b>	LAB & SMOCK	Group 11 or 12 along with goggles and smock.
<b>Respirator Type</b>		Full face breathing air respirator
<b>Chemical Glove Type</b>		Butyl Rubber

**PPE Example**

