

MATERIAL SAFETY DATA SHEET

SECTION 1 - PRODUCT AND COMPANY IDENTIFICATION

Manufacturer: AccuStandard, Inc.
125 Market Street
New Haven, CT 06513

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Information Phone Number: 203-786-5290
Emergency Phone Number: 203-786-5290
Hours: Mon. to Fri. 8am-5pm

Catalog Number: M-531-08
Product Name: Carbofuran
Synonyms: N/A
Formula: N/A

Molecular Weight: N/A

ASM-531-08

SECTION 2 - COMPOSITION / INFORMATION ON INGREDIENTS

Component(s)	(2)	CAS #	Appr. %	ACGIH-TLV (mg/m ³)		OSHA-PEL (mg/m ³)	
				TWA	STEL skin	TWA	STEL skin
Carbofuran		1563-66-2	0.01	0.1			
Acetonitrile		75-05-8	99.99	67	101	x	70

SECTION 3 - HAZARDS IDENTIFICATION

Symptoms of Exposure:

Over exposure may cause headache, breathing difficulty, irritation of eyes and throat, central nervous system disturbances and unconsciousness.

Effects may be delayed.

May cause blood, central nervous system, kidneys, liver, lungs, and reproductive system damage

Breathing high vapor concentrations may cause cyanide poisoning.

Potential Health Effects:

Irritating to eyes.

Irritation to skin

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Harmful if absorbed through skin.

Irritating to mucous membrane and upper respiratory system.

Harmful if inhaled.

Harmful if swallowed.

Routes of Entry:

Inhalation, ingestion or skin contact.

Carcinogenicity:

This product is or contains a component that is classified (ACGIH, IARC, NTP, OSHA) as probably not a cancer hazard

SECTION 4 - FIRST AID MEASURES

Emergency First Aid:

Get medical assistance for all cases of overexposure.

Always have on hand a cyanide first aid kit. Break an amyl nitrite pearl in a cloth and hold lightly under nose for 15 seconds. Repeat five times at about 15 second intervals. Call A Physician.

Skin contact: Wash thoroughly with soap and water. Get medical attention if irritation develops or persists.

Eye contact: Immediately flush with plenty of water. After initial flushing, remove and contact lenses and continue flushing for at least 15 minutes. Assure adequate flushing by separating the eyelids with fingers.

Inhalation: Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

Ingestion: Drink water and induce vomiting immediately as directed by medical personnel. Never give anything by mouth to an unconscious person. Get medical attention immediately.

SECTION 5 - FIRE FIGHTING MEASURES

Flammable Properties:

Flash Point: 35.6 °F (2 °C) (cc)

Flammable Limits LEL (%): 4.40

Flammable Limits UEL (%): 16.00

Autoignition Temperature: 523 °C

Dangerous fire and explosive hazard.

Vapors can travel to a source of ignition and flash back.

During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion.

Extinguishing Media:

Use alcohol foam, carbon dioxide, dry chemical, or water spray when fighting fires involving this material.

Fire Fighting Procedures:

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As in any fire, wear self-contained breathing apparatus pressure demand, NIOSH/MSHA (approved or equivalent) and full protective gear.

SECTION 6 - ACCIDENTAL RELEASE MEASURES

Spill Response:

Wear suitable protective equipment listed under Exposure Controls / Personal Protection. Eliminate any ignition sources until the area is determined to be free from explosion or fire hazards. Contain the release and eliminate its source, if this can be done without risk. Dispose as hazardous waste. Comply with Federal, State and local regulations.

SECTION 7 - HANDLING AND STORAGE

Store in a tightly closed container.

Store in a cool place below 14°F (-10°C).

Do not breathe vapor.

Use with adequate ventilation.

Do not get in eyes, on skin or clothing.

Avoid prolonged or repeated exposure.

This product should only be used by persons trained in the safe handling of hazardous chemicals.

SECTION 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

Engineering Controls and Personal Protection Equipment (PPE):

Respiratory Protection: If workplace exposure limit(s) of product or any component is exceeded (see TLV/PEL), a NIOSH/MSHA approved air supplied respirator is advised in absence of proper environmental control. OSHA regulations also permit other NIOSH/MSHA respirators (negative pressure type) under specified conditions (see your safety equipment supplier). Engineering and/or administrative controls should be implemented to reduce exposure.

Material should be handled or transferred in an approved fume hood or with adequate ventilation.

Compatible chemical-resistant protective gloves must be worn to prevent skin contact.

Safety glasses with side shields must be worn at all times.

General Hygiene Considerations:

Wash thoroughly after handling. Do not take internally. Eye wash and safety equipment should be readily available.

SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Clear liquid

Odor: Pungent odor

pH: N/A

Vapor Pressure: 72.8 mmHg (20 °C)

Vapor Density (Air = 1): 1.41 g/L

Boiling Point: 81.6 °C

Melting Point: -45.7 °C

Solubility in Water: Soluble

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Specific Gravity (H₂O = 1): 0.785 g/cm³

Flash Point: 35.6 °F (2 °C) (cc)

Explosion Limits (%): 4.40 to 16.00

Autoignition Temperature: 523 °C

Percent Volatile: 99.9+

Evaporation Rate (BuAc = 1): 5.79

Molecular Weight: N/A

Molecular Formula: N/A

SECTION 10 - STABILITY AND REACTIVITY

Stability: Stable

Conditions To Avoid: Heat; Contact with ignition sources

Materials To Avoid: Acids
Bases
Oxidizers

Alkali metals; Reducing agents

Hazardous Decomposition: Hydrogen cyanide (HCN); Carbon oxides; Nitrogen oxides

Forms HCN when heated to about 120 °C

Hazardous Polymerization: Will not occur

SECTION 11 - TOXICOLOGICAL INFORMATION

See section 3 for specific toxicological information for the ingredients of this product.

SECTION 12 - ECOLOGICAL INFORMATION

By complying with sections 6 and 7 there will be no release to the environment.

SECTION 13 - DISPOSAL CONSIDERATIONS

Recycle or incinerate at any EPA approved facility or dispose in compliance with Federal, State and local regulations. Empty containers must be triple-rinsed prior to disposal.

SECTION 14 - TRANSPORT INFORMATION

DOT UN Number: UN1648 Shipping Class: 3 Packing Group: II FLAMMABLE

SECTION 15 - REGULATORY INFORMATION

In addition to Federal and state regulations, local regulations may apply. Check with your local regulatory authorities.

All components are listed on the TSCA Inventory. For laboratory, research and development use only. Not for manufacturing or commercial purposes.

SECTION 16 - OTHER INFORMATION

This document has been designed to meet the requirements of OSHA, ANSI and CHIP's regulations.

The statements contained herein are offered for informational purposes only and are based on technical data that we believe to be accurate. It is intended for use only by persons having the necessary technical skill and at their own discretion and risk. Since conditions and manner of use are outside our control, we make

NO WARRANTY, EXPRESSED OR IMPLIED, OF MERCHANTABILITY, FITNESS OR OTHERWISE.

Legend: N/A = Not Available ND = Not Determined NR = Not regulated

*** End of Document ***

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