



## Material Safety Data Sheet

Carbonyl Cyanide M -Chlorophenylhydrazone, 99+%

MSDS# 82880

### Section 1 - Chemical Product and Company Identification

MSDS Name: Carbonyl Cyanide M -Chlorophenylhydrazone, 99+%  
Catalog Numbers: AC228130000, AC228130010, AC228131000  
Synonyms: Mesoxalonitrile (3-chlorophenyl)Hydrazone; M -Chlorophenyl Carbonylcyanide Hydrazone.

Company Identification: Acros Organics BVBA  
Janssen Pharmaceuticalaan 3a  
2440 Geel, Belgium

Company Identification: (USA) Acros Organics  
One Reagent Lane  
Fair Lawn, NJ 07410

For information in the US, call: 800-ACROS-01

For information in Europe, call: +32 14 57 52 11

Emergency Number, Europe: +32 14 57 52 99

Emergency Number US: 201-796-7100

CHEMTREC Phone Number, US: 800-424-9300

CHEMTREC Phone Number, Europe: 703-527-3887

### Section 2 - Composition, Information on Ingredients

CAS#: 555-60-2  
Chemical Name: Carbonyl Cyanide 3-Chlorophenylhydrazone  
%: 99+%  
EINECS#: 209-103-7

Hazard Symbols: T



Risk Phrases: 23/24/25

### Section 3 - Hazards Identification

#### EMERGENCY OVERVIEW

Warning! May cause central nervous system depression. May cause eye and skin irritation. May cause cardiac disturbances. May cause respiratory and digestive tract irritation. Metabolized to cyanide in the body, which may cause headache, dizziness, weakness, unconsciousness, convulsions, coma and possible death. Target Organs: Central nervous system, cardiovascular system.

#### Potential Health Effects

Eye: May cause eye irritation.

Skin: May cause skin irritation. May be metabolized to cyanide which in turn acts by inhibiting cytochrome oxidase impairing cellular respiration.

Ingestion: May cause irritation of the digestive tract. May cause cardiac disturbances. May cause central nervous system depression. Metabolism may release cyanide, which may result in headache, dizziness, weakness, collapse, unconsciousness and possible death.

Inhalation: May cause respiratory tract irritation. May cause cardiac abnormalities. Inhalation at high concentrations may

cause CNS depression and asphyxiation.

Chronic: May be metabolized to cyanide which in turn acts by inhibiting cytochrome oxidase impairing cellular respiration. Effects may be delayed.

#### Section 4 - First Aid Measures

Eyes: Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid.

Skin: Get medical aid. Flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Wash clothing before reuse.

Ingestion: Never give anything by mouth to an unconscious person. Get medical aid. Do NOT induce vomiting. If conscious and alert, rinse mouth and drink 2-4 cupfuls of milk or water.

Inhalation: Remove from exposure and move to fresh air immediately. If breathing is difficult, give oxygen. Get medical aid. If breathing has ceased apply artificial respiration using oxygen and a suitable mechanical device such as a bag and a mask.

Notes to Physician: May be partially metabolized to cyanide in the body.

Antidote: Always have a cyanide antidote kit on hand when working with cyanide compounds. Get medical advice to use.

#### Section 5 - Fire Fighting Measures

General Information: As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear. During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion. Use water spray to keep fire-exposed containers cool. Containers may explode when heated. Non-combustible, substance itself does not burn but may decompose upon heating to produce corrosive and/or toxic fumes. Runoff from fire control or dilution water may cause pollution.

Extinguishing Media: Use water spray to cool fire-exposed containers. For small fires, use dry chemical, carbon dioxide, or water spray. For large fires, use dry chemical, carbon dioxide, alcohol-resistant foam, or water spray.

Autoignition Temperature: Not applicable.

Flash Point: Not applicable.

Explosion Limits: Lower: Not available

Explosion Limits: Upper: Not available

NFPA Rating: health: 2; flammability: 0; instability: 0;

#### Section 6 - Accidental Release Measures

General Information: Use proper personal protective equipment as indicated in Section 8.

Spills/Leaks: Vacuum or sweep up material and place into a suitable disposal container. Clean up spills immediately, observing precautions in the Protective Equipment section. Avoid generating dusty conditions. Provide ventilation.

#### Section 7 - Handling and Storage

Handling: Wash thoroughly after handling. Use with adequate ventilation. Minimize dust generation and accumulation. Avoid contact with eyes, skin, and clothing. Keep container tightly closed. Avoid ingestion and inhalation.

Storage: Store in a tightly closed container. Store in a cool, dry, well-ventilated area away from incompatible substances. Keep refrigerated. (Store below 4°C/39°F.)

#### Section 8 - Exposure Controls, Personal Protection

Chemical Name	ACGIH	NIOSH	OSHA - Final PELs
Carbonyl Cyanide 3-Chlorophenylhydrazo-	none listed	none listed	5 mg/m <sup>3</sup> TWA
ne			(listed under Cyanide anion).

OSHA Vacated PELs: Carbonyl Cyanide 3-Chlorophenylhydrazone: 5 mg/m<sup>3</sup> TWA (as CN) (listed under Cyanide anion)

#### Engineering Controls:

Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Use adequate ventilation to keep airborne concentrations low.

#### Exposure Limits

#### Personal Protective Equipment

Eyes: Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.

Skin: Wear appropriate protective gloves to prevent skin exposure.

Clothing: Wear appropriate protective clothing to prevent skin exposure.

Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a

Respirators: NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.

### Section 9 - Physical and Chemical Properties

Physical State: Powder

Color: yellow

Odor: None reported.

pH: Not available

Vapor Pressure: Not available

Vapor Density: Not available

Evaporation Rate: Not available

Viscosity: Not available

Boiling Point: Not available

Freezing/Melting Point: 175.00 - 177.00 deg C

Decomposition Temperature: Not available

Solubility in water: Not available

Specific Gravity/Density:

Molecular Formula: C9H5ClN4

Molecular Weight: 204.62

### Section 10 - Stability and Reactivity

Chemical Stability: Stable under normal temperatures and pressures.

Conditions to Avoid: Incompatible materials, dust generation, excess heat, oxidizers.

Incompatibilities with Other Materials: Strong oxidizing agents, strong reducing agents, strong acids, strong bases.

Hazardous Decomposition Products: Hydrogen chloride, hydrogen cyanide, nitrogen oxides, carbon monoxide, carbon monoxide, carbon dioxide, nitrogen gas.

Hazardous Polymerization: Has not been reported.

### Section 11 - Toxicological Information

RTECS#: CAS# 555-60-2: FG5600000

LD50/LC50: RTECS: Not available.

Carcinogenicity: Carbonyl Cyanide 3-Chlorophenylhydrazine - Not listed as a carcinogen by ACGIH, IARC, NTP, or CA Prop 65.

Other: See actual entry in RTECS for complete information. The hazards associated with cyanide may be seen in this product.

### Section 12 - Ecological Information

Not available

### Section 13 - Disposal Considerations

Dispose of in a manner consistent with federal, state, and local regulations.

### Section 14 - Transport Information

US DOT

Shipping Name: Please contact Fisher Scientific for shipping information

Hazard Class:  
UN Number:  
Packing Group:  
Canada TDG  
Shipping Name: Not available  
Hazard Class:  
UN Number:  
Packing Group:

## Section 15 - Regulatory Information

### European/International Regulations

#### European Labeling in Accordance with EC Directives

Hazard Symbols: T

Risk Phrases:

R 23/24/25 Toxic by inhalation, in contact with skin and if swallowed.

Safety Phrases:

S 24/25 Avoid contact with skin and eyes.

S 28A After contact with skin, wash immediately with plenty of water.

S 37 Wear suitable gloves.

S 45 In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

#### WGK (Water Danger/Protection)

CAS# 555-60-2: 3

#### Canada

CAS# 555-60-2 is listed on Canada's NDSL List

Canadian WHMIS Classifications: D2B

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all of the information required by those regulations.

CAS# 555-60-2 is not listed on Canada's Ingredient Disclosure List.

#### US Federal

##### TSCA

CAS# 555-60-2 is listed on the TSCA  
Inventory.

## Section 16 - Other Information

MSDS Creation Date: 9/02/1997

Revision #7 Date 7/20/2009

The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no event shall the company be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential, or exemplary damages howsoever arising, even if the company has been advised of the possibility of such damages.

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