



## Material Safety Data Sheet

Mandelonitrile, tech.

MSDS# 70343

### Section 1 - Chemical Product and Company Identification

MSDS Name: Mandelonitrile, tech.

Catalog Numbers: AC152090000, AC152091000, AC152095000

Synonyms: Acetonitrile, hydroxyphenyl-; Amygdalonitrile; Benzaldehyde cyanohydrin; Glycolonitrile, phenyl-; Mandelic acid nitrile; Nitril kyseliny mandlove (Czech)

Company Identification: Acros Organics BVBA  
Janssen Pharmaceuticaaan 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#: 532-28-5  
Chemical Name: Mandelonitrile, tech.  
%: ca. 100  
EINECS#: 208-532-7

Hazard Symbols: T



Risk Phrases: 23/24/25

### Section 3 - Hazards Identification

#### EMERGENCY OVERVIEW

Warning! Moisture sensitive. The toxicological properties of this material have not been fully investigated. Causes severe eye irritation. Harmful if swallowed, inhaled, or absorbed through the skin. Target Organs: No data found.

#### Potential Health Effects

Eye: Causes severe eye irritation.

Skin: Causes skin irritation.

Ingestion: Metabolism may release cyanide, which may result in headache, dizziness, weakness, collapse, unconsciousness and possible death. Causes gastrointestinal tract irritation. May form methemoglobin which in sufficient concentration causes cyanosis (bluish discoloration of skin due to deficient oxygenation of the blood).

Inhalation: May cause effects similar to those described for ingestion. Causes irritation of the mucous membrane and upper respiratory tract.

Chronic: Absorption into the body leads to the formation of methemoglobin which in sufficient concentrations causes cyanosis (bluish discoloration of skin due to deficient oxygenation of the blood). 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 immediately.

Skin: Get medical aid immediately. Immediately 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 immediately. Do NOT induce vomiting. If conscious and alert, rinse mouth and drink 2-4 cupfuls of milk or water.

Inhalation: Get medical aid immediately. Remove from exposure and move to fresh air immediately. Do not use mouth-to-mouth resuscitation if victim ingested or inhaled the substance; induce artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device.

Notes to Physician:

#### 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. Vapors may be heavier than air. They can spread along the ground and collect in low or confined areas.

Extinguishing Media: In case of fire, use water, dry chemical, chemical foam, or alcohol-resistant foam.

Autoignition Temperature: Not applicable.

Flash Point: 97 deg C ( 206.60 deg F)

Explosion Limits: Lower: Not available

Explosion Limits: Upper: Not available

NFPA Rating: health: 2; flammability: 1; instability: 0;

#### Section 6 - Accidental Release Measures

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

Spills/Leaks: Wash area with soap and water. Absorb spill using an absorbent, non-combustible material such as earth, sand, or vermiculite. Do not use combustible materials such as sawdust. Provide ventilation.

#### Section 7 - Handling and Storage

Handling: Wash thoroughly after handling. Use with adequate ventilation. Do not get in eyes, on skin, or on clothing. Keep container tightly closed. Do not ingest or inhale. Keep from contact with moist air and steam. Do not breathe vapor.

Storage: Keep containers tightly closed. Store protected from moisture. Store in a cool, dry area away from incompatible substances.

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

Chemical Name	ACGIH	NIOSH	OSHA - Final PELs
Mandelonitrile, tech.	none listed	none listed	none listed
h.			

OSHA Vacated PELs: Mandelonitrile, tech.: None listed

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 and clothing to prevent skin exposure.

Clothing: Wear appropriate protective clothing to prevent skin exposure.

Respirators: A respiratory protection program that meets OSHA's 29 CFR 1910.134 and ANSI Z88.2 requirements or European Standard EN 149 must be followed whenever workplace conditions warrant respirator use.

#### Section 9 - Physical and Chemical Properties

Physical State: Liquid

Color: brown

Odor: None reported.

pH: Not available

Vapor Pressure: Not available

Vapor Density: Not available

Evaporation Rate: Not available

Viscosity: Not available

Boiling Point: 170 deg C @ 760.00mmHg ( 338.00°F)

Freezing/Melting Point: -10 deg C ( 14.00°F)

Decomposition Temperature:

Solubility in water: May decompose

Specific Gravity/Density: 1.1170g/cm3

Molecular Formula: C8H7NO

Molecular Weight: 133.15

#### Section 10 - Stability and Reactivity

Chemical Stability: Stable. However, may decompose if exposed to moist air or water.

Conditions to Avoid: Incompatible materials, moisture.

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

Hazardous Decomposition Products Hydrogen cyanide, nitrogen oxides, carbon monoxide, carbon dioxide.

Hazardous Polymerization Has not been reported.

#### Section 11 - Toxicological Information

RTECS#: CAS# 532-28-5: OO8400000

RTECS:

LD50/LC50: CAS# 532-28-5: Draize test, rabbit, eye: 250 ug/24H Severe;

Carcinogenicity: Mandelonitrile, tech. - Not listed as a carcinogen by ACGIH, IARC, NTP, or CA Prop 65.

Other: Standard Draize Test: Administration into the eye (rabbit) = 250 ug (Severe).

#### Section 12 - Ecological Information

Other: No information 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: TOXIC LIQUIDS, ORGANIC, N.O.S.

Hazard Class: 6.1

UN Number: UN2810

Packing Group: III

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

#### WGK (Water Danger/Protection)

CAS# 532-28-5: Not available

#### Canada

CAS# 532-28-5 is listed on Canada's NDSL List

Canadian WHMIS Classifications: D1B, 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# 532-28-5 is listed on Canada's Ingredient Disclosure List

### US Federal

#### TSCA

CAS# 532-28-5 is listed on the TSCA  
Inventory.

## Section 16 - Other Information

MSDS Creation Date: 7/08/1999

Revision #6 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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