

Material Safety Data Sheet

3-Phenoxybenzaldehyde cyanohydrin, 70 wt% solution in ether

ACC# 52477

Section 1 - Chemical Product and Company Identification

MSDS Name: 3-Phenoxybenzaldehyde cyanohydrin, 70 wt% solution in ether

Catalog Numbers: AC185630000, AC185630100

Synonyms: alpha-Hydroxy-m-phenoxyphenylacetonitrile

Company Identification:

Acros Organics N.V.

One Reagent Lane

Fair Lawn, NJ 07410

For information in North America, call: 800-ACROS-01

For emergencies in the US, call CHEMTREC: 800-424-9300

Section 2 - Composition, Information on Ingredients

CAS#	Chemical Name	Percent	EINECS/ELINCS
52315-06-7	3-Phenoxybenzaldehyde cyanohydrin	70	257-841-3
60-29-7	Ethyl ether	30	200-467-2

Section 3 - Hazards Identification

EMERGENCY OVERVIEW

Appearance: orange viscous liquid. Flash Point: 4 deg C.

Warning! Flammable liquid and vapor. Causes respiratory tract irritation. Harmful if swallowed, inhaled, or absorbed through the skin. Causes eye and skin irritation. May cause digestive tract irritation. Aspiration hazard if swallowed. Can enter lungs and cause damage. May form explosive peroxides. May cause central nervous system depression. May cause kidney damage.

Target Organs: Kidneys, central nervous system.

Potential Health Effects

Eye: Causes eye irritation. May cause chemical conjunctivitis and corneal damage.

Skin: Causes skin irritation. Harmful if absorbed through the skin. May cause cyanosis of the extremities.

Ingestion: Harmful if swallowed. May cause gastrointestinal irritation with nausea, vomiting and diarrhea. Possible aspiration hazard.

Ingestion of large amounts may cause CNS depression.

Inhalation: Causes respiratory tract irritation. Aspiration may lead to pulmonary edema. Vapors may cause dizziness or suffocation. May cause burning sensation in the chest.

Chronic: Effects may be delayed. May cause kidney damage. Possible risk of irreversible effects.

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. Immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Wash clothing before reuse.

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

Inhalation: Get medical aid immediately. Remove from exposure and move to fresh air immediately. If breathing is difficult, give oxygen. Do NOT use mouth-to-mouth resuscitation. If breathing has ceased apply artificial respiration using oxygen and a suitable mechanical device such as a bag and a mask.

Notes to Physician: Treat symptomatically and supportively.

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. Vapors may form an explosive mixture with air. 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. Will burn if involved in a fire. Use water spray to keep fire-exposed containers cool. Containers may explode in the heat of a fire. Flammable liquid and vapor. May form explosive peroxides. Vapors may be heavier than air. They can spread along the ground and collect in low or confined areas.

Extinguishing Media: For small fires, use dry chemical, carbon dioxide, water spray or alcohol-resistant foam. For large fires, use water spray, fog, or alcohol-resistant foam. Use water spray to cool fire-exposed containers. Water may be ineffective. Use agent most appropriate to extinguish fire. Do NOT use straight streams of water.

Flash Point: 4 deg C (39.20 deg F)

Autoignition Temperature: Not applicable.

Explosion Limits, Lower:Not available.

Upper: Not available.

NFPA Rating: (estimated) Health: 2; Flammability: 4; Instability: 0

Section 6 - Accidental Release Measures

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

Spills/Leaks: Absorb spill with inert material (e.g. vermiculite, sand or earth), then place in suitable container. Clean up spills immediately, observing precautions in the Protective Equipment section. Remove all sources of ignition. Use a spark-proof tool. Provide ventilation. A vapor suppressing foam may be used to reduce vapors.

Section 7 - Handling and Storage

Handling: Wash thoroughly after handling. Remove contaminated clothing and wash before reuse. Use only in a well-ventilated area. Ground and bond containers when transferring material. Use spark-proof tools and explosion proof equipment. Avoid contact with eyes, skin, and clothing. Empty containers retain product residue, (liquid and/or vapor), and can be dangerous. Keep container tightly closed. Keep away from heat, sparks and flame. Do not ingest or inhale. Do not pressurize, cut, weld, braze, solder, drill, grind, or expose empty containers to heat, sparks or open flames.

Storage: Keep away from heat, sparks, and flame. Keep away from sources of ignition. Store in a tightly closed container. Store in a cool, dry, well-ventilated area away from incompatible substances. Refrigerator/flammables.

Section 8 - Exposure Controls, Personal Protection

Engineering Controls: Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Use adequate general or local explosion-proof ventilation to keep airborne levels to acceptable levels.

Exposure Limits

Chemical Name	ACGIH	NIOSH	OSHA - Final PELs
3-Phenoxybenzaldehyde cyanohydrin	none listed	none listed	none listed
Ethyl ether	400 ppm TWA; 500 ppm STEL	1900 ppm IDLH	400 ppm TWA; 1200 mg/m3 TWA

OSHA Vacated PELs: 3-Phenoxybenzaldehyde cyanohydrin: No OSHA Vacated PELs are listed for this chemical. Ethyl ether: 400 ppm TWA; 1200 mg/m3 TWA

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.

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: Viscous liquid

Appearance: orange

Odor: None reported.

pH: Not available.

Vapor Pressure: Not available.

Vapor Density: 7.77

Evaporation Rate: Not available.

Viscosity: Not available.

Boiling Point: Not available.

Freezing/Melting Point: Not available.

Decomposition Temperature: Not available.

Solubility: Not available.

Specific Gravity/Density: 1.1130 g/cm3

Molecular Formula: C₁₄H₁₁NO₂

Molecular Weight: 225.25

Section 10 - Stability and Reactivity

Chemical Stability: Stable at room temperature in closed containers under normal storage and handling conditions.

Conditions to Avoid: Incompatible materials, ignition sources, excess heat, strong oxidants.

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

Hazardous Decomposition Products: Hydrogen cyanide, nitrogen oxides, carbon monoxide, irritating and toxic fumes and gases, carbon dioxide, nitrogen.

Hazardous Polymerization: Has not been reported.

Section 11 - Toxicological Information

RTECS#:

CAS# 52315-06-7 unlisted.

CAS# 60-29-7: KI5775000

LD50/LC50:

Not available.

CAS# 60-29-7:

Draize test, rabbit, eye: 100 mg Moderate;
Inhalation, mouse: LC50 = 31000 ppm/30M;
Oral, mouse: LD50 = 1760 mg/kg;
Oral, rat: LD50 = 1215 mg/kg;
Skin, rabbit: LD50 = >20 mL/kg;

Carcinogenicity:

CAS# 52315-06-7: Not listed by ACGIH, IARC, NTP, or CA Prop 65.

CAS# 60-29-7: Not listed by ACGIH, IARC, NTP, or CA Prop 65.

Epidemiology: No information available.

Teratogenicity: No information available.

Reproductive Effects: No information available.

Mutagenicity: CAS# 60-29-7: DNA Repair: Escherichia coli = 35670 ug/well/16H.; DNA Inhibition: Mouse, Embryo = 2850 mg/L.; Mutation Test Systems - not otherwise specified: Hamster, Fibroblast = 1 pph.

Neurotoxicity: No information available.

Other Studies:

Section 12 - Ecological Information

No information available.

Section 13 - Disposal Considerations

Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. US EPA guidelines for the classification determination are listed in 40 CFR Parts 261.3. Additionally, waste generators must consult state and local hazardous waste regulations to ensure complete and accurate classification.

RCRA P-Series: None listed.

RCRA U-Series:

CAS# 60-29-7: waste number U117 (Ignitable waste).

Section 14 - Transport Information

	US DOT	Canada TDG
Shipping Name:	TOXIC LIQUIDS, FLAMMABLE, ORGANIC, N.O.S.	No information available.
Hazard Class:	6.1	
UN Number:	UN2929	
Packing Group:	I	

Section 15 - Regulatory Information

US FEDERAL

TSCA

CAS# 52315-06-7 is not listed on the TSCA inventory. It is for research and development use only.

CAS# 60-29-7 is listed on the TSCA inventory.

Health & Safety Reporting List

None of the chemicals are on the Health & Safety Reporting List.

Chemical Test Rules

None of the chemicals in this product are under a Chemical Test Rule.

Section 12b

None of the chemicals are listed under TSCA Section 12b.

TSCA Significant New Use Rule

None of the chemicals in this material have a SNUR under TSCA.

CERCLA Hazardous Substances and corresponding RQs

CAS# 60-29-7: 100 lb final RQ; 45.4 kg final RQ

SARA Section 302 Extremely Hazardous Substances

None of the chemicals in this product have a TPQ.

SARA Codes

CAS # 60-29-7: immediate, fire, sudden release of pressure, reactive.

Section 313 No chemicals are reportable under Section 313.

Clean Air Act:

This material does not contain any hazardous air pollutants.

This material does not contain any Class 1 Ozone depleters.

This material does not contain any Class 2 Ozone depleters.

Clean Water Act:

None of the chemicals in this product are listed as Hazardous Substances under the CWA.

None of the chemicals in this product are listed as Priority Pollutants under the CWA.

None of the chemicals in this product are listed as Toxic Pollutants under the CWA.

OSHA:

None of the chemicals in this product are considered highly hazardous by OSHA.

STATE

CAS# 52315-06-7 is not present on state lists from CA, PA, MN, MA, FL, or NJ.

CAS# 60-29-7 can be found on the following state right to know lists: California, New Jersey, Pennsylvania, Minnesota, Massachusetts.

California Prop 65

California No Significant Risk Level: None of the chemicals in this product are listed.

European/International Regulations

European Labeling in Accordance with EC Directives

Hazard Symbols:

T F

Risk Phrases:

R 11 Highly flammable.

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

Safety Phrases:

S 16 Keep away from sources of ignition - No smoking.

S 24/25 Avoid contact with skin and eyes.

S 33 Take precautionary measures against static discharges.

S 9 Keep container in a well-ventilated place.

WGK (Water Danger/Protection)

CAS# 52315-06-7: No information available.

CAS# 60-29-7: 1

Canada - DSL/NDSL

CAS# 60-29-7 is listed on Canada's DSL List.

Canada - WHMIS

This product has a WHMIS classification of B2, D2A, D1B.

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.

Canadian Ingredient Disclosure List

CAS# 60-29-7 is listed on the Canadian Ingredient Disclosure List.

Section 16 - Additional Information

MSDS Creation Date: 9/02/1997

Revision #7 Date: 10/03/2005

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 Fisher 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 Fisher has been advised of the possibility of such damages.