

Material Safety Data Sheet

trans-Cinnamaldehyde

ACC# 96752

Section 1 - Chemical Product and Company Identification

MSDS Name: trans-Cinnamaldehyde**Catalog Numbers:** AC110350000, AC110350010, AC110350500, AC110355000, AC219780000, AC219780500 AC219780500**Synonyms:** (E)-Cinnamaldehyde; 3-Phenyl-2-propenal; 3-Phenylacrolein; 3-Phenylpropenal; Cinnamyl aldehyde; Cinnamic aldehyde.**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
14371-10-9	trans-Cinnamaldehyde	99	unlisted

Section 3 - Hazards Identification

EMERGENCY OVERVIEW

Appearance: clear yellow oil. Flash Point: 71 deg C.

Warning! Causes eye, skin, and respiratory tract irritation. Harmful if absorbed through the skin. May cause allergic skin reaction.**Target Organs:** Respiratory system, eyes, skin.**Potential Health Effects****Eye:** Causes eye irritation.**Skin:** Causes skin irritation. May cause skin sensitization, an allergic reaction, which becomes evident upon re-exposure to this material. The highest non-irritating concentration of cinnamaldehyde was 0.5% in vaseline and 1% in acetone (guinea pig study by DSM Special Products). In humans, closed patch test found 3% in petrolatum produced no irritation after 48 hours. 8% in petrolatum produced severe irritation after 48 hours. A patch test in humans found a concentration of 1% in petrolatum was sensitizing in 15 out of 16 persons. Another human patch test found 68% positive reactions (50/73) when 5% cinnamaldehyde in vaseline was used. 21% positive reactions (15/71) when 2% cinnamaldehyde in vaseline was used.**Ingestion:** Causes gastrointestinal irritation with nausea, vomiting and diarrhea. Low hazard for usual industrial handling.

Inhalation: Causes respiratory tract irritation.

Chronic: No information found.

Section 4 - First Aid Measures

Eyes: In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Get medical aid.

Skin: In case of contact, immediately flush skin with soap and plenty of water. Remove contaminated clothing and shoes. Get medical aid if symptoms occur. Wash clothing before reuse.

Ingestion: If swallowed, do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Get medical aid.

Inhalation: If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical aid.

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. During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion. Combustible liquid and vapor. Vapors are heavier than air and may travel to a source of ignition and flash back. Vapors can spread along the ground and collect in low or confined areas.

Extinguishing Media: Use extinguishing media most appropriate for the surrounding fire.

Flash Point: 71 deg C (159.80 deg F)

Autoignition Temperature: Not applicable.

Explosion Limits, Lower:Not available.

Upper: Not available.

NFPA Rating: (estimated) Health: 2; Flammability: 2; Instability: 1

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. Avoid runoff into storm sewers and ditches which lead to waterways. Clean up spills immediately, observing precautions in the Protective Equipment section. Remove all sources of ignition. Provide ventilation.

Section 7 - Handling and Storage

Handling: Wash thoroughly after handling. Remove contaminated clothing and wash before reuse. Use with adequate ventilation. Avoid contact with eyes, skin, and clothing. Keep container tightly closed. Avoid ingestion and inhalation.

Storage: Store in a tightly closed container. Keep refrigerated. (Store below 4°C/39°F.)

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 ventilation to keep airborne concentrations low.

Exposure Limits

Chemical Name	ACGIH	NIOSH	OSHA - Final PELs
trans-Cinnamaldehyde	none listed	none listed	none listed
Cinnamaldehyde	none listed	none listed	none listed

OSHA Vacated PELs: trans-Cinnamaldehyde: No OSHA Vacated PELs are listed for this chemical.

Cinnamaldehyde: No OSHA Vacated PELs are listed for this chemical.

Personal Protective Equipment

Eyes: Wear chemical splash goggles.

Skin: Wear appropriate protective gloves to prevent skin exposure.

Clothing: Wear appropriate protective clothing to prevent skin exposure.

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

Appearance: clear yellow

Odor: cinnamon odor

pH: Not available.

Vapor Pressure: 0.0289 mm Hg @ 25 deg C

Vapor Density: 4.6 (air=1)

Evaporation Rate: Not available.

Viscosity: Not available.

Boiling Point: 246 deg C

Freezing/Melting Point: -7.5 deg C

Decomposition Temperature: Not available.

Solubility: 1.42 g/l @ 25°C

Specific Gravity/Density: 1.05

Molecular Formula: C₉H₈O

Molecular Weight: 132.16

Section 10 - Stability and Reactivity

Chemical Stability: Stable under normal temperatures and pressures. Thickens on exposure to air.

Conditions to Avoid: Excess heat, prolonged exposure to air, excess light.

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

Hazardous Decomposition Products: Carbon monoxide, irritating and toxic fumes and gases, carbon dioxide.

Hazardous Polymerization: May occur.

Section 11 - Toxicological Information

RTECS#:**CAS#** 14371-10-9: GD6476000**CAS#** 104-55-2: GD6475000**LD50/LC50:**

CAS# 14371-10-9:

Oral, rat: LD50 = 3350 mg/kg;

CAS# 104-55-2:

Oral, mouse: LD50 = 2225 mg/kg;

Oral, rat: LD50 = 2220 mg/kg;

Acute dermal LD50 rabbit: > 2000 mg/kg (No mortality was found at the dose of 2000 mg/kg.) DSM Special Products.

Carcinogenicity:

CAS# 14371-10-9: Not listed by ACGIH, IARC, NTP, or CA Prop 65.

CAS# 104-55-2: Not listed by ACGIH, IARC, NTP, or CA Prop 65.

Epidemiology: No information available.**Teratogenicity:** No information available.**Reproductive Effects:** No information available.**Mutagenicity:** No information available.**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:** None listed.

Section 14 - Transport Information

	US DOT	Canada TDG
Shipping Name:	Not Regulated	Not Regulated
Hazard Class:		

UN Number:		
Packing Group:		

Section 15 - Regulatory Information

US FEDERAL

TSCA

CAS# 14371-10-9 is not listed on the TSCA inventory. It is for research and development use only.
CAS# 104-55-2 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

None of the chemicals in this material have an RQ.

SARA Section 302 Extremely Hazardous Substances

None of the chemicals in this product have a TPQ.

SARA Codes

CAS # 104-55-2: immediate, fire.

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 depletors.

This material does not contain any Class 2 Ozone depletors.

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# 14371-10-9 is not present on state lists from CA, PA, MN, MA, FL, or NJ.

CAS# 104-55-2 is not present on state lists from CA, PA, MN, MA, FL, or NJ.

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:

XN

Risk Phrases:

R 21 Harmful in contact with skin.

R 36/37/38 Irritating to eyes, respiratory system and skin.

Safety Phrases:

S 26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

S 36/37/39 Wear suitable protective clothing, gloves and eye/face protection.

WGK (Water Danger/Protection)

CAS# 14371-10-9: No information available.

CAS# 104-55-2:

Canada - DSL/NDSL

CAS# 104-55-2 is listed on Canada's DSL List.

Canada - WHMIS

This product has a WHMIS classification of 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.

Canadian Ingredient Disclosure List

CAS# 104-55-2 is listed on the Canadian Ingredient Disclosure List.

Section 16 - Additional Information
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MSDS Creation Date: 10/02/1998

Revision #6 Date: 1/22/2008

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.