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ACCT: 463282001
CAT NO: AC110355000

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**** MATERIAL SAFETY DATA SHEET ****

Trans-Cinnamaldehyde, 99%
752

**** SECTION 1 - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION ****

DS Name: Trans-Cinnamaldehyde, 99%
tag Numbers: AC110350000, AC110350010, AC110350500, AC110352500, AC110355000
onyms:
3-Phenyl-2-Propenal; 3-Phenylacrolein; 3-Phenylpropenal; Cinnamyl
Aldehyde; Cinnimic Aldehyde.

Company Identification (Europe): ACROS Organics BVBA
Janassen Pharmaceuticaal 3a
2440 Geel, Belgium
Acros Organics
One Reagent Lane
Fairlawn, NJ 07410
call: 800-ACROS-01

Company Identification (USA):
Information in North America, call: 800-ACROS-01
Information in Europe, call: 0032(0) 14575211
Emergencies in the US, call CHEMTREC: 800-424-9300
Emergencies in Europe, call: 0032(0) 14575299

**** SECTION 2 - COMPOSITION, INFORMATION ON INGREDIENTS ****

CAS#	Chemical Name	%	EINECS#
104-55-2	Trans-Cinnamaldehyde	99	203-213-9

Hazard Symbols: XN XI
Risk Phrases: 36/37/38

**** SECTION 3 - HAZARDS IDENTIFICATION ****

EMERGENCY OVERVIEW

Appearance: clear yellow liquid.
Irritation: Causes eye and skin irritation. Causes digestive and
respiratory tract irritation.
Target Organs: None known.

Acute Health Effects

Eye:
Causes eye irritation.
Skin:
Causes skin irritation.
Ingestion:
Causes gastrointestinal irritation with nausea, vomiting and
diarrhea. The toxicological properties of this substance have not
been fully investigated.
Inhalation:
Causes respiratory tract irritation. The toxicological properties of
this substance have not been fully investigated.
Chronic:
No information found.

**** 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:
Immediately flush skin with plenty of soap and water for at least 15
minutes while removing contaminated clothing and shoes. Get medical
aid if irritation develops or persists. 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.
Inhalation:
Remove from exposure to fresh air immediately. If not breathing,
give artificial respiration. If breathing is difficult, give oxygen.
Get medical aid.
Notes to Physician:
Treat symptomatically.

**** 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:
Use foam, dry chemical, or carbon dioxide. Use agent most
appropriate to extinguish fire.

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Autoignition Temperature: Not applicable.
Flash Point: 232 deg F (111.11 deg C)
Explosion Limits, lower: Not available.
Explosion Limits, upper: Not available.
NFPA Rating:

**** 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. Wash hands before eating. Remove
contaminated clothing and wash before reuse. Use with adequate
ventilation. Avoid contact with skin and eyes. 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.

**** 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 exhaust ventilation to keep airborne concentrations below the
permissible exposure limits.

Exposure Limits			
Chemical Name	ACGIH	NIOSH	OSHA - Final PELs
Trans-Cinnamaldehyde	none listed	none listed	none listed

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

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:
Follow the OSHA respirator regulations found in 29
CFR 1910.134 or European Standard EN 149. Always use
a NIOSH or European Standard EN 149 approved
respirator when necessary.

**** SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES ****

Physical State: Liquid
Color: clear yellow
Odor: Strong cinnamon odor.
pH: Not available.
Vapor Pressure: 1 mm Hg @ 76C
Vapor Density: 4.6
Evaporation Rate: Not available.
Viscosity: Not available.
Boiling Point: 247 deg C (decomposes)
Freezing/Melting Point: -8 deg C
Decomposition Temperature: Not available.
Solubility in water: slightly soluble in water.
Specific Gravity/Density: 1.05
Molecular Formula: C9H8O
Molecular Weight: 132.0554

**** SECTION 10 - STABILITY AND REACTIVITY ****

Chemical Stability:
Stable under normal temperatures and pressures.

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Conditions to Avoid:
Incompatible materials, excess heat.
Incompatibilities with Other Materials:
Strong oxidizing agents and strong bases.
Hazardous Decomposition Products:
Carbon monoxide, irritating and toxic fumes and gases, carbon dioxide.
Hazardous Polymerization: Has not been reported.

**** SECTION 11 - TOXICOLOGICAL INFORMATION ****

RTECS#:
CAS# 104-55-2: GD6475000
LD50/LC50:
CAS# 104-55-2: Oral, mouse: LD50 = 2225 mg/kg; Oral, rat: LD50 = 2220 mg/kg.
Carcinogenicity:
Trans-Cinnamaldehyde -
Not listed by ACGIH, IARC, NIOSH, NTP, or OSHA.
Epidemiology:
No information available.
Teratogenicity:
No information available.
Reproductive Effects:
No information available.
Neurotoxicity:
No information available.
Mutagenicity:
No information available.
Other Studies:
No data available.

**** SECTION 12 - ECOLOGICAL INFORMATION ****

**** SECTION 13 - DISPOSAL CONSIDERATIONS ****

Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste.
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.
RA P-Series: None listed.
RA U-Series: None listed.

**** SECTION 14 - TRANSPORT INFORMATION ****

US DOT
No information available.
Canadian TDG
No information available.

**** SECTION 15 - REGULATORY INFORMATION ****

US FEDERAL

TSCA
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.
SARA
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: acute, flammable.
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

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by OSHA.

STATE
Trans-Cinnamaldehyde is not present on state lists from CA, PA, MN, MA, FL, or NJ.
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 XI
Risk Phrases:

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

Safety Phrases:

S 23 Do not inhale gas/fumes/vapour/spray.

WGK (Water Danger/Protection)

CAS# 104-55-2:

United Kingdom Occupational Exposure Limits

United Kingdom Maximum Exposure Limits

Canada

CAS# 104-55-2 is listed on Canada's DSL List.
This product has a WHMIS classification of D2B.
CAS# 104-55-2 is listed on Canada's Ingredient Disclosure List.

Exposure Limits

**** SECTION 16 - ADDITIONAL INFORMATION ****

MSDS Creation Date: 10/02/1998 Revision #1 Date: 8/02/2000

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 way 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.