



Material Safety Data Sheet

18 Beta-Glycyrrhetic Acid, 98+% (Titr., on the Anhydrous Basis)

MSDS# 35851

Section 1 - Chemical Product and Company Identification

MSDS Name: 18 Beta-Glycyrrhetic Acid, 98+% (Titr., on the Anhydrous Basis)
Catalog Numbers: AC120150000, AC120150050, AC120150250
Synonyms: Enoxolone
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#: 471-53-4
Chemical Name: 18-á-Glycyrrhetic Acid
%: 98
EINECS#: 207-444-6

Hazard Symbols: None listed
Risk Phrases: None listed

Section 3 - Hazards Identification

EMERGENCY OVERVIEW

Caution! The toxicological properties of this material have not been fully investigated. May cause eye and skin irritation. May cause respiratory and digestive tract irritation. Target Organs: No data found.

Potential Health Effects

Eye: May cause eye irritation.
Skin: May cause skin irritation.
Ingestion: May cause irritation of the digestive tract. The toxicological properties of this substance have not been fully investigated.
Inhalation: May cause respiratory tract irritation. The toxicological properties of this substance have not been fully investigated.
Chronic: No information found.

Section 4 - First Aid Measures

Eyes: 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. Never give anything by mouth to an unconscious person. Get medical aid. Do NOT induce vomiting. If
Ingestion: 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 not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical aid.

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.
Extinguishing Media: Use agent most appropriate to extinguish fire. Use water spray, dry chemical, carbon dioxide, or appropriate foam.

Autoignition Temperature: Not applicable.
Flash Point: Not applicable.

Explosion Limits: Lower: Not available
Upper: Not available

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

Section 6 - Accidental Release Measures

General Information: Use proper personal protective equipment as indicated in Section 8.
Spills/Leaks: Clean up spills immediately, observing precautions in the Protective Equipment section. Sweep up, then place into a suitable container for disposal. Avoid generating dusty conditions. Provide ventilation.

Section 7 - Handling and Storage

Handling: Wash thoroughly after handling. Remove contaminated clothing and wash before reuse. 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.

Section 8 - Exposure Controls, Personal Protection

Table with 4 columns: Chemical Name, ACGIH, NIOSH, OSHA - Final PELs. Row 1: 18-á-Glycyrrhetic Acid, none listed, none listed, none listed.

OSHA Vacated PELs: 18-á-Glycyrrhetic Acid: 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 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: Solid

Color: white to gray white

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: 292.00 - 295.00 deg C

Decomposition Temperature: Not available

Solubility in water: soluble in acetic acid

Specific Gravity/Density:

Molecular Formula: C30H46O4

Molecular Weight: 470.69

Section 10 - Stability and Reactivity

Chemical Stability: Stable under normal temperatures and pressures.
Conditions to Avoid: Incompatible materials, dust generation, excess heat, strong oxidants.
Incompatibilities with Other Materials: Not available

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# 471-53-4; RK0180000
LD50/LC50: RTECS: Not available.
Carcinogenicity: 18-á-Glycyrrhetic Acid - Not listed as a carcinogen by ACGIH, IARC, NTP, or CA Prop 65.
Epidemiology: No information found
Teratogenicity: No information found
Reproductive: No information found
Neurotoxicity: No information found
Mutagenicity: No information found
Other: Not available

Section 12 - Ecological Information

Not 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 Shipping Name: Not regulated as a hazardous material

Hazard Class:

UN Number:

Packing Group:

Canada TDG Shipping Name: Not available

Hazard Class:

UN Number:

Packing Group:

Section 15 - Regulatory Information

US Federal

TSCA

CAS# 471-53-4 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.

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: STATE 18-á-Glycyrrhetic Acid 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: Not available

Risk Phrases:

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# 471-53-4: Not available

Canada

CAS# 471-53-4 is listed on Canada's DSL List

Canadian WHMIS Classifications: Not available

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# 471-53-4 is not listed on Canada's Ingredient Disclosure List.

Section 16 - Other Information

MSDS Creation Date: 9/02/1997

Revision #5 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 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.