

SafetSy Data Sheet



SECTION 1: Identification of the substance/mixture and the company/undertaking

1.1 Production identifiers

Product name : DDBSA DODECYLBENZENE SULFONIC ACID
Brand : CJ Chemicals LLC
CAS-No. : 27176-87-0

1.2 Relevant identified uses of the substance or mixture and uses advised against

Identified uses : Laboratory chemicals, synthesis of substances

1.3 Details of the supplier of the safety data sheet

Company : CJ Chemicals LLC
3469 E Grand River Rd #112
Howell, MI 48843
United States

Telephone : +1 (888) 274-1044

1.4 Emergency Telephone

Emergency Phone # : 1-800-424-9300 CHEMTREC (USA)
1-703-527-3887 CHEMTREC (international) 24 hours/day; 7 days/week

2. Information on Ingredients

Product Name: DDBSA (Dodecylbenzene Sulfonic Acid)

CAS No: 27176-87-0 EINECS: 248-289-4

Detergent Acid (high 2-phenyl C-12/13 type)

An organic sulfonic acid

Contains minimum 96% dodecylbenzene sulfonic acid {Cas #27176-87-0} and 1.5% sulfuric acid, {CAS #7664-93-9} which are hazardous (CORROSIVE) MATERIALS. DDBSA does not contain any known carcinogens at 0.1% or above or carcinogens known to be hazardous at lower concentrations. This material is regulated under Canada's WHMIS at a threshold level of 1% as an ingredient in mixtures. See section 11 for exposure limits.

Exposure Limits: (See Section 11)

DOT Category: CORROSIVE

OSHA Category: CORROSIVE

HEALTH	3-HIGH
FIRE	1-SLIGHT
REACTIVITY	2-MODERATE

3. Hazard Identification

Causes severe chemical burns to skin and other tissue. Vapors may be extremely irritating to respiratory tract and may cause severe eye damage including blindness. Contact with the eyes will cause irritation, reddening and possible chemical burns. Swallowing material may cause burning feeling resulting in irritation and possible chemical burns. Also harmful to fish and other water organisms. Keep out of waterways. It is toxic to plants, wildlife and domestic animals as well.

4 - First Aid Measures

NEVER GIVE ANYTHING BY MOUTH TO AN UNCONSCIOUS PERSON

Ingestion: Get emergency medical attention IMMEDIATELY. Careful evacuation of stomach by medical personnel is imperative.

Skin: Remove contaminated clothing – wash area with mild soap in potable water. Wash contaminated clothing before reusing. Discard contaminated footwear.

Eyes: Flush with potable water or sterile buffer. Do not let victim rub eyes. Hold eyelids open to assure complete flushing.

Inhalation: Remove to fresh air – artificial respiration if necessary.

SEEK PROMPT MEDICAL ATTENTION FOR EYE CONTACT OR INGESTION.
IF ANY SYMPTOMS PERSIST CONSULT A PHYSICIAN.

5 - Fire Fighting Measures

Flash point:>300°F

Explosive Limits: Not a safety factor due to low volatility.

Use extinguishing media appropriate to primary source of fire. Keep containers cool – must be hot to burn.

DDBSA can burn in fire releasing hazardous combustion products including carbon monoxide, carbon dioxide, corrosive and toxic oxides of sulfur. Dike and collect water used to fight fire since run off will be slippery and can cause environmental damage. Self contained breathing apparatus and protective clothing should be worn while fighting fires involving chemicals.

6 - Accidental Release Measures

Isolate hazard area. Dike around large spills to prevent spreading. Keep unnecessary and unprotected personnel from entering. Protective clothing should be worn while handling spills (see section 8). Recover all usable material. Avoid run-off into sewers or ditches, which lead to waterways. Soak up remainder with sand or dirt. Neutralize with a weak base such as sodium carbonate or sodium bicarbonate (Carbon dioxide gas will be released) or a dilute dispersion of lime. After removal, flush contaminated area thoroughly with water. The Reportable Quantity (RQ) under SARA Title III & CERCLA is 1000lb. for dodecylbenzene sulfonic acid. Environmental releases require reporting to an environmental agency. The toll free number for the U.S. Coast Guard National Response Center is (800) 424-8802.

7 - Handling and Storage

Avoid contact with eyes, skin and clothing. Avoid breathing vapors. Remove contaminated clothing and wash before re-use. Follow all MSDS/label precautions even after container is emptied because it may contain product residues. In the presence of water, DDBSA reacts with most metals releasing hydrogen gas, which is explosive and lighter than air (collects at ceiling). Keep in dry and well ventilated area. To preserve color, store under a nitrogen blanket. Keep container closed when not in use. Keep floor sweeping compound, cat litter, sand, or

similar material in handling areas for emergency use.

8 - Exposure Controls / PPE

Exposure limits: See Section 11

Use supplied air or MESA or NIOSH gas mask with acid gas canister if TLV is exceeded. Adequate ventilation should be provided. Chemically resistant safety shoes and chemical goggles or face shield and goggles are recommended. Provide nearby safety showers & eye washing (preferably full face) facilities. Protective rubber or neoprene gloves with substantial cuff are required for contact with product or solutions. Long sleeve shirt with buttoned collar and long pants extending over work shoes are recommended. Use supplied air for combustion products.

9 - Physical/Chemical Properties

Specific Gravity:	1.04 @ 21°C
Percent volatile matter:	<1%
Appearance:	Viscous amber liquid
Odor:	Characteristics of sulfur dioxide/trioxide
Boiling Point:	>400°F
Solubility in water:	Essentially complete – may be gel
pH of 10% Solution:	<1 (highly acidic)
Evaporation Rate:	Negligible

10 - Stability and Reactivity

DDBSA is stable but may decompose if heated. Hazardous polymerization will not occur. DDBSA is strong acid and an oxidizing material. It is incompatible with strong, concentrated oxidizing agents and chlorine bleach and reacts violently with concentrated alkalis.

11 - Toxicological Information

Threshold limit value:	ACGIH Threshold Value (TLV) is 1mg/m ³ TWA basis sulfuric acid component for a time weighted average (TWA) over an 8-hour workday, 40-hour workweek. Additionally, there is an ACGIH Short Term Exposure Limit (STEL) of 3 mg/M ³ for a time weighted average (TWA) over any 15 minute period.
Eye contact:	Destructive on contact – causes severe irritation and may cause blindness.
Inhalation:	Mist or vapor will irritate nasal passages and may cause ulceration.
Skin Contact:	Corrosive to contacted tissues causing sever pain and chemical burns.
Ingestion:	Severe burns and tissue perforation, irritation, nausea, and vomiting.
Chronic:	Repeated exposure can cause cumulative ulceration and pulmonary edema.

12 - Ecological Information

When neutralized, DDBSA is biodegradable under most definitions of the term. In the un-neutralized acid form this material is toxic to most aquatic and terrestrial plants and other life forms.

13 - Disposal Considerations

Neutralized DDBSA is found in many household cleaning products. Release of neutralized material to sanitary sewer in small amounts is inherent with most ends uses. Un-neutralized material should be treated as a strong, corrosive acid. No disposal method should be used which would pose an environmental or human health threat including any which would contaminate ground or surface waters.

14 - Transport Information

Proper shipping name: ALKYL SULFONIC ACIDS, LIQUID, 8, UN2586, PGIII

Hazard Class: 8 – CORROSIVE MATERIAL

Vessel Stowage: May be stowed on deck or under deck on cargo vessels or on passenger vessels carrying no more than 25 passengers or one passenger per each 3 meters of overall length or on deck only of passenger vessels carrying larger numbers of passengers.

Aircraft Quantity Limitations: Passenger aircraft – 1 liter, cargo aircraft – 30 liters

15 - Regulatory Information

OSHA Category: CORROSIVE

TSCA: This material is listed in the USEPA's TSCA inventory.

CERCLA: The Reportable Quantity (RQ) under CERCLA is 1,000#

SARA: This product is subject to Section 313 Annual Toxic Release Reporting under Title III.

16 - Other Information

THE INFORMATION ABOVE IS BELIEVED TO BE ACCURATE AND REPRESENTS THE BEST INFORMATION CURRENTLY AVAILABLE TO US. HOWEVER, SILVER FERN CHEMICAL 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.
