SAFETY DATA SHEET

Conforms to regulation (EC) no. EU 453/2010

SECTION 1 - IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1 Product Identifier

Product Name: SDS **Product Number:** EC-604

1.2 Relevant Identified Uses of the Substance/Mixture and Uses Advised Against

Investigational research by professional users

1.3 Details of the Supplier of the Safety Data Sheet

Manufacturer
National Diagnostics
305 Patton Drive
Atlanta, GA 30036
(404) 699-2121
(800) 526-3867
info@nationaldiagnostics.com

1.4 Emergency Telephone Number

Chemtrec
1-800 424-9300 (U.S. & Canada)
01-703-527-3887 (outside U.S. & Canada)

SECTION 2 - HAZARDS IDENTIFICATION

2.1 Classification of the Substance or Mixture

Classification according to Regulation (EC) No. 1272/2008 [EU-GHS/CLP]

H302 - Acute Toxicity-Oral (Category 4)
H315 - Skin Corrosion/Irritation (Category 2)
H319 - Serious Eye Damage/Eye Irritation (Category 2A)
H335 - Specific Target Organ Toxicity, Single Exposure (Category 3)

2.2 Label Elements

GHS LABEL ELEMENTS AND CLASSIFICATION

GHS Label Elements

WARNING
H302 - Harmful if swallowed
H315 - Causes skin irritation.
H319 - Causes serious eye irritation.
H335 - May cause respiratory irritation.
P264 - Wash skin thoroughly after handling.
P281 - Use personal protective equipment as required.
P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing.
P304+P340 - IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
P314 - Get medical advice/attention if you feel unwell.

2.3 Other Hazards

None found.

SECTION 3 - COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substance

Chemical Names/Description

Sodium lauryl sulfate; Duponol; Dodecyl sodium sulfate; Sulfuric acid, monodecyl ester.

Chemical Formula

$C_{12}H_{25}NaO_4S$

Component List

Component	% Comp.	CAS #	EC #
SDS	> 99	151-21-3	205-788-1

SECTION 4 - FIRST AID MEASURES

4.1 Description of First Aid Measures

Inhalation

Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Call a physician.

Ingestion

Give large amounts of water to drink. Never give anything by mouth to an unconscious person. Get medical attention.

Skin

Immediately flush skin with plenty of soap and water for at least 15 minutes while removing contaminated clothing and shoes. Get medical attention. Wash clothing before reuse. Thoroughly clean shoes before reuse.

Eyes

Immediately flush eyes with plenty of water for at least fifteen minutes, lifting lower and upper eyelids occasionally. Get medical attention immediately.

4.2 Most Important Symptoms and Effects, Both Acute and Delayed

Inhalation

Coughing, shortness of breath. May cause allergic reaction in sensitive individuals.

Ingestion

Nausea and diarrhea.

Skin

Causes dryness and a rash on continued exposure.

Eyes

Causes redness and pain.

4.3 Indication of Any Immediate Medical Attention and Special Treatment Needed

Unknown/not applicable

SECTION 5 - FIRE FIGHTING MEASURES

5.1 Extinguishing media

Use media appropriate to the primary cause of fire.

5.2 Special Hazards Arising from the Substance/Mixture

Hazardous Combustion Products

Oxides or carbon, sulfur, and sodium oxide.

Hazardous Decomposition Products

Oxides of carbon, sulfur and sodium oxide may be formed when heated to decomposition.

Hazardous Polymeriation

Will not occur under normal conditions of use (See Sections 10.4 & 10.5).

5.3 Advice for Firefighters

In the event of a fire, wear full protective clothing and NIOSH-approved self-contained breathing apparatus with full facepiece operated in the pressure demand or other positive pressure mode.

5.4 Further Information

No data available.

SECTION 6 - ACCIDENTAL RELEASE MEASURES

6.1 Personal Precautions

Wear appropriate protective equipment as specified in Section 8.

6.2 Environmental Precautions

Prevent discharge into the environment. Dike spills and stop leakage where practical. Do not allow material to enter drains.

6.3 Methods and Materials for Containment and Cleaning Up

Ventilate area of leak or spill. Pick up and place in a suitable container for reclamation or disposal, using a method that does not generate dust.

6.4 References to Other Sections

For disposal information, see Section 13. For Protective clothing and equipment, see Section 8.

SECTION 7 - HANDLING AND STORAGE

7.1 Precautions for Safe Handling

Avoid contact and inhalation. Do not get in eyes, on skin, on clothing. Wash thoroughly after handling.

7.2 Conditions for Safe Storage (including any incompatibles)

Keep in a tightly closed container, stored in a cooled, dry, ventilated area. Protect from physical damage. Isolate from incompatible materials (section 10).

Incompatibles

Strong oxidizers, acids.

7.3 Specific End Uses

Investigational research by professional users

SECTION 8 - EXPOSURE CONTROLS/PERSONAL PRECAUTIONS

8.1 Control Parameters

ACGIH Threshold Limit Value (TLV): None established
OSHA Permissable Exposure Limit (PEL): None established

8.2 Exposure Controls

Engineering Controls

A system of local and/or general exhaust is recommended to keep employee exposures low. Local exhaust ventilation is generally preferred because it can control the emissions of the contaminant at its source.

Respiratory Protection

For conditions of use where exposure to the dust or mist is apparent, a full-face dust/mist respirator may be worn.

Eye Protection

Use chemical safety goggles and/or a full face shield where splashing is possible. Maintain eye wash fountain and quick-drench facilities in work area.

Skin Protection

Wear protective gloves and clean body covering clothing.

SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on Basic Physical & Chemical Properties

a. Appearance	Fine, white or slightly yellow powder	**b. Odor**	None
c. Odor Threshold	N.A.	**d. pH**	No information found
e. Melting/Freezing Point (^{o}C)	204-207	**f. Boiling point (^{o}C)**	No information found
g. Flash Point (^{o}C)	N.A.	**h. Evaporation Rate**	No information found
i. Flammability	N.A.	**j. Upper/Lower Flammability or Explosive Limits**	N.A.
k. Vapor Pressure	No information found	**l. Vapor Density (Air = 1)**	No information found
m. Relative Density	0.4 @ 15 C	**n. Water Solubility**	20g/100ml
o. Partition Coefficient n-octanol/water	log Pow<= -2.03	**p. Autoignition Temperature (^{o}C)**	N.A
q. Decomposition Temperature (^{o}C)	N.A.	**r. Viscosity**	No data available.
s. Explosive Properties	N.A.	**t. Oxidizing Properties**	Not an oxidizer

SECTION 10 - STABILITY AND REACTIVITY

10.1 Reactivity

Non reactive under ordinary conditions of use

10.2 Chemical Stability

Stable under ordinary conditions of use and storage.

10.3 Possibility of Hazardous Reactions

Will not occur under normal conditions of use (See Sections 10.4 & 10.5).

10.4 Conditions to Avoid

Heat, incompatibles.

10.5 Incompatible Materials

Strong oxidizers, acids.

10.6 Hazardous Decomposition Products

Oxides of carbon, sulfur and sodium oxide may be formed when heated to decomposition.

SECTION 11 - TOXICOLOGICAL INFORMATION

Product LD50 Values

Oral Rat LD50 (mg/kg)

1301

Dermal Rabbit LD50 (mg/kg)

No Data

Component Cancer List Status

	NTP Carcinogen		
	Known	Anticipated	IARC Category
SDS	No	No	None

Potential Health Effects

Inhalation

Dust causes irritation to the respiratory tract.

Ingestion

Large doses may cause gastrointestinal distress.

Skin

Mildly irritating to skin. May cause allergic skin reactions.

Eyes

Causes irritation to the eyes.

Carcinogenicity

Not listed as a known or suspected carcinogen by NTP or IARC.

Mutagenicity

Has caused mutagenic effects on laboratory animals.

Reproductive Toxicity

Has caused mutagenic effects on laboratory animals.

Teratogenic Effects

No information found.

Routes of Entry

No information found.

Target Organ Statement

Persons with pre-existing skin disorders or impaired respiratory function may be more susceptible to the effects of the substance.

SECTION 12 - ECOLOGICAL INFOMATION

12.1 Toxicity

	Vertebrates	Invertebrates	Algae	Microorganisms
Aquatic Toxcitiy (ppm unless otherwise noted)	The 96 hr LC50 of dodecyl sulfate to Fathead minnows was 29 mg/L	LC50 (Ceriodaphnia dubia, 48-hr): 5.55 mg/L	EC50>120mg/L	IC50 (3 hrs): 480 mg/L

	Birds	Arthropods	Plants	Microorganisms
Terrestrial Environment Toxicity (ppm unless otherwise noted)	No data	No data	EC50 (72hr, Cicer arietinum) 361 mg/L	No data

12.2 Persistence and Degradability

Readily biodegradable (>95% degradation in 28 days)

12.3 Bioaccumulative Potential

No data

12.4 Mobility in Soil
Log Koc 1.545

12.5 Results of PBT and vPvB Assessment
Not PBT vPvB

12.6 Other Adverse Effects
None

SECTION 13 - DISPOSAL CONSIDERATIONS
13.1 Waste Treatment Methods
Offer surplus or non-recyclable product to licensed disposal company. Disposal is subject to user compliance with applicable law and product characteristics at time of disposal. Dispose of packaging as product.

SECTION 14 - TRANSPORT INFORMATION

	ADR/RID	IATA	IMO	DOT
14.1 UN Number	N.A.	N.A.	N.A.	N.A.
14.2 Shipping Name	Not Regulated.	Not Regulated.	Not Regulated.	Not Regulated.
14.3 Hazard Class	N.A.	N.A.	N.A.	N.A.
14.4 Packing Group	N.A.	N.A.	N.A.	N.A.
14.5 Environmental Hazards	N.A.	N.A.	N.A.	N.A.
14.6 Special Precautions	N.A.	N.A.	N.A.	N.A.

SECTION 15 - REGULATORY INFORMATION
15.1 Safety, Health and Environmental Regulations/Legislation Specific for the Substance/Mixture
United States
TSCA Regulatory Statement
All intentional ingredients are listed on the TSCA Inventory.

SARA 311/312 Hazard Categories

Component	Fire	Pressure	Reactivity	Acute	Chronic
SDS	No	No	No	Yes	Yes

Europe
EEC Regulatory
All intentional ingredients are listed on the European EINECS Inventory.

SECTION 16 - OTHER INFORMATION
Revisional Updates
5/29/2015 - Updated Sections 2.1 and 3.1
8/9/2013- Released Version 1.0

NFPA Codes
Health 1 **Flammability** 0 **Reactivity** 0