# Allura Red AC

## sc-214523

**Material Safety Data Sheet** 



Hazard Alert Code Key: EXTREME HIGH MODERATE LOW

## Section 1 - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

## **PRODUCT NAME**

Allura Red AC

## STATEMENT OF HAZARDOUS NATURE

CONSIDERED A HAZARDOUS SUBSTANCE ACCORDING TO OSHA 29 CFR 1910.1200.

## **NFPA**



## **SUPPLIER**

Santa Cruz Biotechnology, Inc. 2145 Delaware Avenue Santa Cruz, California 95060 800.457.3801 or 831.457.3800

## EMERGENCY

ChemWatch

Within the US & Canada: 877-715-9305 Outside the US & Canada: +800 2436 2255 (1-800-CHEMCALL) or call +613 9573 3112

#### SYNONYMS

C18-H14-N2-O8-S2 • 2Na, "C.I. Food Red 17", "C.I. 16035", "disodium salt of 6-hydroxy-5[(2-methoxy-5-methyl-4-sulphophenyl)azo]-2-", "naphthalene sulphuric acid", "2-naphthalenesulfonic acid, 6-hydroxy-5-((6-methocy-4-sulfo-m-", "tolyl)azo)-, disodium salt", "1-{(6-methoxy-4sulfo-m-tolyl)azo]-2-naphthol-6-sulfonic acid disodium", salt, "Allura Red", 5, "E 129 Allura Red AC"

## **Section 2 - HAZARDS IDENTIFICATION**

## **CHEMWATCH HAZARD RATINGS**

		Min	Max
Flammability:	1		
Toxicity:	0		
Body Contact:	0		Min/Nil=0 Low=1
Reactivity:	1		Moderate=2
Chronic:	2		High=3 Extreme=4

## **CANADIAN WHMIS SYMBOLS**



#### **EMERGENCY OVERVIEW**

#### RISK

Possible risk of irreversible effects.

#### **POTENTIAL HEALTH EFFECTS**

#### **ACUTE HEALTH EFFECTS**

#### **SWALLOWED**

■ Although ingestion is not thought to produce harmful effects, the material may still be damaging to the health of the individual following ingestion, especially where pre-existing organ (e.

g.

#### EYE

■ Although the material is not thought to be an irritant, direct contact with the eye may cause transient discomfort characterized by tearing or conjunctival redness (as with windburn).

Slight abrasive damage may also result.

#### SKIN

■ The material is not thought to produce adverse health effects or skin irritation following contact (as classified using animal models). Nevertheless, good hygiene practice requires that exposure be kept to a minimum and that suitable gloves be used in an occupational setting.

#### **INHALED**

- The material is not thought to produce adverse health effects or irritation of the respiratory tract (as classified using animal models). Nevertheless, good hygiene practice requires that exposure be kept to a minimum and that suitable control measures be used in an occupational setting.
- Persons with impaired respiratory function, airway diseases and conditions such as emphysema or chronic bronchitis, may incur further disability if excessive concentrations of particulate are inhaled.

#### **CHRONIC HEALTH EFFECTS**

■ Long-term exposure to the product is not thought to produce chronic effects adverse to the health (as classified using animal models); nevertheless exposure by all routes should be minimized as a matter of course.

Strong evidence exists that the substance may cause irreversible but non-lethal mutagenic effects following a single exposure.

Long term exposure to high dust concentrations may cause changes in lung function i.e. pneumoconiosis; caused by particles less than 0.5 micron penetrating and remaining in the lung.

Some azo dyes may be able to cause mutations and be associated with thedevelopment of bladder cancer.

Section 3 - COMPOSITION / INFORMATION ON INGREDIENTS
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NAME	CAS RN	%
FD & C Red No. 40	25956-17-6	>98

#### **Section 4 - FIRST AID MEASURES**

#### **SWALLOWED**

· Immediately give a glass of water. · First aid is not generally required. If in doubt, contact a Poisons Information Center or a doctor.

#### **EYE**

■ If this product comes in contact with eyes: · Wash out immediately with water. · If irritation continues, seek medical attention.

#### SKIN

■ If skin or hair contact occurs: · Flush skin and hair with running water (and soap if available). · Seek medical attention in event of irritation.

## **INHALED**

· If fumes or combustion products are inhaled remove from contaminated area. · Other measures are usually unnecessary.

## **NOTES TO PHYSICIAN**

■ Treat symptomatically.

Periodic medical surveillance should be carried out on persons in occupations exposed to the manufacture or bulk handling of the product and this should include hepatic function tests and urinalysis examination. [ILO Encyclopaedia].

Section 5 - FIRE FIGHTING MEASURES			
Vapour Pressure (mmHG):	Not applicable.		
Upper Explosive Limit (%):	Not available.		
Specific Gravity (water=1):	Not available.		
Lower Explosive Limit (%):	Not available.		

#### **EXTINGUISHING MEDIA**

- · Water spray or fog.
- · Foam.

#### **FIRE FIGHTING**

- · Alert Emergency Responders and tell them location and nature of hazard.
- · Wear breathing apparatus plus protective gloves.

## GENERAL FIRE HAZARDS/HAZARDOUS COMBUSTIBLE PRODUCTS

- · Combustible solid which burns but propagates flame with difficulty.
- Avoid generating dust, particularly clouds of dust in a confined or unventilated space as dusts may form an explosive mixture with air, and any source of ignition, i.e. flame or spark, will cause fire or explosion. Dust clouds generated by the fine grinding of the solid are a particular hazard; accumulations of fine dust may burn rapidly and fiercely if ignited.

Combustion products include: carbon monoxide (CO), carbon dioxide (CO2), nitrogen oxides (NOx), sulfur oxides (SOx), other pyrolysis products typical of burning organic material.

#### FIRE INCOMPATIBILITY

■ Avoid contamination with oxidizing agents i.e. nitrates, oxidizing acids,chlorine bleaches, pool chlorine etc. as ignition may result.

#### PERSONAL PROTECTION

Glasses:

Chemical goggles.

Gloves:

Respirator:

Particulate

## **Section 6 - ACCIDENTAL RELEASE MEASURES**

#### MINOR SPILLS

- · Clean up all spills immediately.
- · Avoid contact with skin and eyes.

**MAJOR SPILLS** 

- · Clear area of personnel and move upwind.
- · Alert Emergency Responders and tell them location and nature of hazard.

#### Section 7 - HANDLING AND STORAGE

#### PROCEDURE FOR HANDLING

- · Limit all unnecessary personal contact.
- · Wear protective clothing when risk of exposure occurs.

Empty containers may contain residual dust which has the potential to accumulate following settling. Such dusts may explode in the presence of an appropriate ignition source.

- · Do NOT cut, drill, grind or weld such containers.
- · In addition ensure such activity is not performed near full, partially empty or empty containers without appropriate workplace safety authorisation or permit.

## **RECOMMENDED STORAGE METHODS**

- $\cdot$  Lined metal can, Lined metal pail/drum
- · Plastic pail.

#### STORAGE REQUIREMENTS

■ Observe manufacturer's storing and handling recommendations.

## Section 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

#### **EXPOSURE CONTROLS**

Source	Material	TWA ppm	TWA mg/m³	STEL ppm	STEL mg/m³	Peak ppm	Peak mg/m³	TWA F/CC	Notes
US - Oregon Permissible Exposure Limits (Z-3)	FD & C Red No. 40 (Inert or Nuisance Dust: (d) Total dust)		10						Oregon Permissible Exposure Limits (PELs) are different than the federal limits.
US OSHA Permissible Exposure Levels (PELs) - Table Z3	FD & C Red No. 40 (Inert or Nuisance Dust: (d) Respirable fraction)		5						
US OSHA Permissible Exposure Levels (PELs) - Table Z3	FD & C Red No. 40 (Inert or Nuisance Dust: (d) Total dust)		15						

US - Hawaii Air Contaminant Limits	FD & C Red No. 40 (Particulates not other wise regulated - Total dust)	10	
US - Hawaii Air Contaminant Limits	FD & C Red No. 40 (Particulates not other wise regulated - Respirable fraction)	5	
US - Oregon Permissible Exposure Limits (Z-3)	FD & C Red No. 40 (Inert or Nuisance Dust:(d) Respirable fraction)	5	Oregon Permissible Exposure Limits (PELs) are different than the federal limits.
Canada - Ontario Occupational Exposure Limits	FD & C Red No. 40 (Particles (Insoluble or Poorly Soluble) Not Otherwise)	10 (I)	
Canada - British Columbia Occupational Exposure Limits	FD & C Red No. 40 (Particles (Insoluble or Poorly Soluble) Not Otherwise Classified (PNOC))	10 (N)	
Canada - Ontario Occupational Exposure Limits	FD & C Red No. 40 (Specified (PNOS) / Particules (insolubles ou peu solubles) non précisées par ailleurs)	3 (R)	
US - Tennessee Occupational Exposure Limits - Limits For Air Contaminants	FD & C Red No. 40 (Particulates not otherwise regulated Respirable fraction)	5	
US - California Permissible Exposure Limits for Chemical Contaminants	FD & C Red No. 40 (Particulates not otherwise regulated Respirable fraction)	5	(n)
US - Oregon Permissible Exposure Limits (Z-1)	FD & C Red No. 40 (Particulates not otherwise regulated (PNOR) (f) Total Dust)	10	Bold print identifies substances for which the Oregon Permissible Exposure Limits (PELs) are different than the federal Limits. PNOR means "particles not otherwise regulated."
US - Michigan Exposure Limits for Air Contaminants	FD & C Red No. 40 (Particulates not otherwise regulated,	5	

Respirable dust) Bold print identifies substances for which the FD & C Red No. Oregon 40 (Particulates Permissible US - Oregon not otherwise Exposure Permissible regulated 5 Limits (PELs) **Exposure Limits** (PNOR) (f) are different (Z-1)Respirable than the Fraction) federal Limits. PNOR means "particles not otherwise regulated."

US - Wyoming FD & C Red No. Toxic and 40 (Particulates Hazardous not otherwise Substances regulated 5 Table Z1 Limits (PNOR)(f)for Air Respirable Contaminants fraction)

FD & C Red No.

Canada - Prince 40 (Particles Edward Island (Insoluble or Occupational Poorly Soluble) **Exposure Limits** [NOS] Inhalable

particles)

See Appendix B current TLV/BEI Book

**ENDOELTABLE** 

#### PERSONAL PROTECTION



10

## **RESPIRATOR**

particulate.

Consult your EHS staff for recommendations

#### EYE

- · Safety glasses with side shields
- · Chemical goggles.

#### HANDS/FEET

- Suitability and durability of glove type is dependent on usage. Important factors in the selection of gloves include: such as:
- · frequency and duration of contact,
- · chemical resistance of glove material,
- · glove thickness and

Select gloves tested to a relevant standard (e.g. Europe EN 374, US F739).

- · When prolonged or frequently repeated contact may occur, a glove with a protection class of 5 or higher (breakthrough time greater than 240 minutes according to EN 374) is recommended.
- · When only brief contact is expected, a glove with a protection class of 3 or higher (breakthrough time greater than 60 minutes according to EN 374) is recommended.
- · Contaminated gloves should be replaced.

Gloves must only be worn on clean hands. After using gloves, hands should be washed and dried thoroughly. Application of a non-perfumed moisturiser is recommended.

Experience indicates that the following polymers are suitable as glove materials for protection against undissolved, dry solids, where abrasive particles are not present.

- · polychloroprene
- · nitrile rubber
- · butyl rubber
- · fluorocaoutchouc
- · polyvinyl chloride

Gloves should be examined for wear and/ or degradation constantly.

#### **OTHER**

■ No special equipment needed when handling small quantities.

#### OTHERWISE:

- · Overalls
- · Barrier cream.

#### **ENGINEERING CONTROLS**

- · Local exhaust ventilation is required where solids are handled as powders or crystals; even when particulates are relatively large, a certain proportion will be powdered by mutual friction.
- Exhaust ventilation should be designed to prevent accumulation and recirculation of particulates in the workplace.

#### Section 9 - PHYSICAL AND CHEMICAL PROPERTIES

## **PHYSICAL PROPERTIES**

Solid.

Mixes with water.

State	Divided solid	Molecular Weight	496.42
Melting Range (°F)	Not available.	Viscosity	Not Applicable
Boiling Range (°F)	Not applicable.	Solubility in water (g/L)	Miscible
Flash Point (°F)	Not Available	pH (1% solution)	Not available.
Decomposition Temp (°F)	Not available.	pH (as supplied)	Not applicable
Autoignition Temp (°F)	Not available.	Vapour Pressure (mmHG)	Not applicable.
Upper Explosive Limit (%)	Not available.	Specific Gravity (water=1)	Not available.
Lower Explosive Limit (%)	Not available.	Relative Vapor Density (air=1)	Not applicable.
Volatile Component (%vol)	Not applicable.	Evaporation Rate	Not applicable

#### **APPEARANCE**

Dark-red granules or powder with negligible odour. Solubility in water at 25 C is 22% and in 50% alcohol is 1.33%. Flammability Color Physical State Odor Miscibility with water - Red Solid Miscible

## **Section 10 - CHEMICAL STABILITY**

#### **CONDITIONS CONTRIBUTING TO INSTABILITY**

■ Product is considered stable and hazardous polymerization will not occur.

#### STORAGE INCOMPATIBILITY

- · Toxic gases are formed by mixing azo and azido compounds with acids, aldehydes, amides, carbamates, cyanides, inorganic fluorides, halogenated organics, isocyanates, ketones, metals, nitrides, peroxides, phenols, epoxides, acyl halides, and strong oxidizing or reducing agents.
- · Flammable gases are formed by mixing azo and azido compounds with alkali metals.

Avoid reaction with oxidizing agents.

For incompatible materials - refer to Section 7 - Handling and Storage.

## Section 11 - TOXICOLOGICAL INFORMATION

FD & C Red No. 40

#### **TOXICITY AND IRRITATION**

FD & C RED NO. 40:

■ unless otherwise specified data extracted from RTECS - Register of Toxic Effects of Chemical Substances.

TOXICITY IRRITATION
Oral (rat) LD50: >10,000 mg/kg No data
Dermal (rabbit) LD50: >10,000 mg/kg

Substance has been investigated as a reproductive effector in rats.

## **Section 12 - ECOLOGICAL INFORMATION**

No data

**Ecotoxicity** 

Ingredient Persistence: Water/Soil Persistence: Air Bioaccumulation Mobility FD & C Red No. 40 No Data Available No Data Available

## **Section 13 - DISPOSAL CONSIDERATIONS**

#### **Disposal Instructions**

All waste must be handled in accordance with local, state and federal regulations.

! Puncture containers to prevent re-use and bury at an authorized landfill.

Legislation addressing waste disposal requirements may differ by country, state and/ or territory. Each user must refer to laws operating in their area. In some areas, certain wastes must be tracked.

A Hierarchy of Controls seems to be common - the user should investigate:

- · Reduction
- · Reuse
- · Recycling
- · Disposal (if all else fails)

This material may be recycled if unused, or if it has not been contaminated so as to make it unsuitable for its intended use. Shelf life considerations should also be applied in making decisions of this type. Note that properties of a material may change in use, and recycling or reuse may not always be appropriate.

DO NOT allow wash water from cleaning equipment to enter drains. Collect all wash water for treatment before disposal.

- · Recycle wherever possible.
- · Consult manufacturer for recycling options or consult Waste Management Authority for disposal if no suitable treatment or disposal facility can be identified.

#### Section 14 - TRANSPORTATION INFORMATION

NOT REGULATED FOR TRANSPORT OF DANGEROUS GOODS: DOT, IATA, IMDG

#### Section 15 - REGULATORY INFORMATION

#### FD & C Red No. 40 (CAS: 25956-17-6) is found on the following regulatory lists;

"Canada Domestic Substances List (DSL)", "International Fragrance Association (IFRA) Survey: Transparency List", "OECD Representative List of High Production Volume (HPV) Chemicals", "US EPA High Production Volume Program Chemical List", "US FDA CFSAN Color Additive Status List 1", "US FDA Listing of Color Additives Subject to Certification - Foods", "US Food Additive Database", "US Toxic Substances Control Act (TSCA) - Inventory"

## **Section 16 - OTHER INFORMATION**

#### ND

Substance CAS Suggested codes FD & C Red No. 40 25956- 17- 6 Mut3; R68

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- Classification of the preparation and its individual components has drawn on official and authoritative sources as well as independent review by the Chemwatch Classification committee using available literature references.

  A list of reference resources used to assist the committee may be found at: www.chemwatch.net/references.
- The (M)SDS is a Hazard Communication tool and should be used to assist in the Risk Assessment. Many factors determine whether the reported Hazards are Risks in the workplace or other settings. Risks may be determined by reference to Exposures Scenarios. Scale of use, frequency of use and current or available engineering controls must be considered.

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