

## SAFETY DATA SHEET

Preparation Date: 2/6/2017

Revision date 5/10/2019

Revision Number: G2

### 1. IDENTIFICATION

**Product identifier**

**Product code:** C1452  
**Product Name:** CURCUMIN

**Other means of identification**

**Synonyms:** C.I. Natural Yellow 3;  
 1,7-Bis(4-hydroxy-3-methoxyphenyl)-1,6-heptadiene-3,5-dione;  
 1,9-Bis(4-hydroxy-3-methoxyphenyl)-2,7-nonadiene-4,6-dione; CI 75300; CI  
 Natural Yellow 3; Curcuma; Diferaloylmethane; Diferuloylmethane;  
 1,6-Heptadiene-3,5-dione, 1,7-bis(4-hydroxy-3-methoxyphenyl)-; Indian saffron;  
 Indian turmeric; Orange Root; Safran d'Inde; Turmeric Yellow; Yellow ginger;  
 Yellow puccoon; Yellow root; Turmeric; 1,5-Divanillyliden-2,4-pentandion;  
 1,5-Di(vanillyliden)acetylaceton

**CAS #:** 458-37-7  
**RTECS #** MI5230000  
**CI#:** 75300

**Recommended use of the chemical and restrictions on use**

**Recommended use:** reduce inflammation.  
**Uses advised against** No information available

**Supplier:** Spectrum Chemical Mfg. Corp  
 14422 South San Pedro St.  
 Gardena, CA 90248  
 (310) 516-8000

**Order Online At:** <https://www.spectrumchemical.com>

**Emergency telephone number** Chemtrec 1-800-424-9300

**Contact Person:** Tom Tyner (USA - West Coast)

**Contact Person:** Ibad Tirmiz (USA - East Coast)

### 2. HAZARDS IDENTIFICATION

**Classification**

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Considered a dangerous substance or mixture according to the Globally Harmonized System (GHS)

Serious eye damage/eye irritation	Category 2B
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**Label elements**

**Warning**

**Hazard statements**  
 Causes eye irritation

**Hazards not otherwise classified (HNOC)**

Not Applicable

**Other hazards**

Not available

**Precautionary Statements - Prevention**

Wash face, hands and any exposed skin thoroughly after handling

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical attention.

**3. COMPOSITION/INFORMATION ON INGREDIENTS**

Component	CAS No	Weight-%
Curcumin	458-37-7	100

**4. FIRST AID MEASURES**

**First aid measures**

**General Advice:** National Capital Poison Center in the United States can provide assistance if you have a poison emergency and need to talk to a poison specialist. Call 1-800-222-1222.

**Skin Contact:** Wash off immediately with soap and plenty of water. Get medical attention if irritation develops.

**Eye Contact:** Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician. Get medical attention.

**Inhalation:** Move to fresh air in case of inhalation. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

**Ingestion:** Do not induce vomiting without medical advice. Never give anything by mouth to an unconscious person. Get medical attention if symptoms appear.

**Most important symptoms and effects, both acute and delayed**

**Symptoms**  
Causes eye irritation  
Mild eye irritation  
May cause skin irritation  
May cause gastrointestinal upset or indigestion  
May cause nausea  
May cause diarrhea

**Indication of any immediate medical attention and special treatment needed**

**Notes to Physician:** Treat symptomatically.

**Protection of first-aiders**

First-Aid Providers: Avoid exposure to blood or body fluids. Wear gloves and other necessary protective clothing. Dispose of contaminated clothing and equipment as bio-hazardous waste.

**5. FIRE-FIGHTING MEASURES**

**Extinguishing Media**

**Suitable Extinguishing Media:** Dry chemical. Carbon dioxide (CO2). Water spray mist, or

foam.

**Unsuitable Extinguishing Media:**

No information available.

**Specific hazards arising from the chemical**

**Hazardous combustion products**

Carbon Monoxide, Carbon Dioxide.

**Specific hazards**

May be combustible at high temperatures.

**Special Protective Actions for Firefighters**

**Specific Methods:**

No information available

**Special Protective Equipment for Firefighters:**

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear

**6. ACCIDENTAL RELEASE MEASURES**

**Personal precautions, protective equipment and emergency procedures**

**Personal Precautions:**

Ensure adequate ventilation. Avoid contact with skin, eyes and clothing. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Remove all sources of ignition.

**Environmental precautions**

Prevent further leakage or spillage if safe to do so. Prevent product from entering drains.

**Methods and material for containment and cleaning up**

**Methods for containment**

Stop leak if you can do it without risk. Cover with plastic sheet to prevent spreading.

**Methods for cleaning up**

Sweep up and shovel into suitable containers for disposal. Clean contaminated surface thoroughly.

**7. HANDLING AND STORAGE**

**Precautions for safe handling**

**Technical Measures/Precautions:**

Provide sufficient air exchange and/or exhaust in work rooms. Avoid dust formation. Keep away from incompatible materials.

**Safe Handling Advice**

Wear personal protective equipment. Avoid contact with skin, eyes and clothing. Do not breathe dust. Do not ingest. Keep away from heat and sources of ignition. Handle in accordance with good industrial hygiene and safety practice.

**Conditions for safe storage, including any incompatibilities**

**Technical Measures/Storage Conditions:**

Store at room temperature in the original container. Store away from incompatible materials. Keep container tightly closed in a dry and well-ventilated place.

**Incompatible Materials:**

Strong oxidizing agents

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### Control parameters

#### National occupational exposure limits

##### United States

Component	CAS No	OSHA	NIOSH	ACGIH	AIHA WEEL
Curcumin	458-37-7	None	None	None	None

##### Canada

Component	CAS No	Canada - Alberta	Canada - British Columbia	Canada - Ontario	Canada - Quebec
Curcumin	458-37-7	None	None	None	None

##### Australia and Mexico

Component	CAS No	Australia	Mexico
Curcumin	458-37-7	None	None

### Appropriate engineering controls

#### Engineering measures to reduce exposure:

Ensure adequate ventilation. Use process enclosures, local exhaust ventilation, or other engineering controls to keep airborne levels below recommended exposure limits. If user operations generate dust, fume or mist, use ventilation to keep exposure to airborne contaminants below the exposure limit.

### Individual protection measures, such as personal protective equipment

#### Personal Protective Equipment

**Eye protection:** Goggles

**Skin and body protection:** Chemical resistant apron  
Long sleeved clothing  
Gloves

**Respiratory protection:** Effective dust mask. Use a dust respirator under conditions where exposure to the substance is apparent (e.g. generation of high concentration of dust (dust clouds) , inadequate ventilation, development of respiratory tract irritation), and engineering controls are not feasible. Be sure to use an approved/certified respirator or equivalent.

**Hygiene measures:** Avoid contact with skin, eyes and clothing. Wash hands before breaks and at the end of workday. When using, do not eat, drink or smoke.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

**Physical state:**  
Solid

**Appearance:**  
Powder. Crystalline powder.

**Color:**  
Yellow. Orange-Yellow.

**Odor:**  
No information available.

**Taste**  
No information available.

**Formula**  
C<sub>21</sub>-H<sub>20</sub>-O<sub>6</sub>

<b>Molecular/Formula weight (g/mole):</b> 368.39	<b>Flammability (solid, gas)</b> no data available	<b>Flashpoint (°C/°F):</b> No information available
<b>Flash Point Tested according to:</b> Not available	<b>Autoignition Temperature (°C/°F):</b> No information available	<b>Lower Explosion Limit (%):</b> No information available
<b>Upper Explosion Limit (%):</b> No information available	<b>Melting point/range(°C/°F):</b> 170-183°C/ 338-361.4°F	<b>Decomposition temperature(°C/°F):</b> No information available
<b>Boiling point/range(°C/°F):</b> No information available	<b>Bulk density:</b> No information available	<b>Density (g/cm3):</b> No information available
<b>Specific gravity:</b> No information available	<b>pH</b> No information available	<b>Vapor pressure @ 20°C (kPa):</b> No information available
<b>Evaporation rate:</b> No information available	<b>Vapor density:</b> 12.72-(Air=1.0)	<b>VOC content (g/L):</b> No information available
<b>Odor threshold (ppm):</b> No information available	<b>Partition coefficient (n-octanol/water):</b> Log Pow = 2.05	<b>Viscosity:</b> No information available
<b>Miscibility:</b> No information available	<b>Solubility:</b> Insoluble in water Slightly soluble in Acetone Slightly soluble in Benzene	

## 10. STABILITY AND REACTIVITY

### Reactivity

No information available

### Chemical stability

**Stability:** Stable at normal conditions.

**Possibility of Hazardous Reactions:** Hazardous polymerization does not occur

**Conditions to avoid:** Heat. Incompatible materials.

**Incompatible Materials:** Strong oxidizing agents

**Hazardous decomposition products:** Carbon oxides. Carbon monoxide.

### Other Information

**Corrosivity:** No information available

**Special Remarks on Corrosivity:** No information available

## 11. TOXICOLOGICAL INFORMATION

### Information on likely routes of exposure

**Principal Routes of Exposure:**  
Ingestion. Inhalation.

### Acute Toxicity

## Component Information

Curcumin	
CAS No	458-37-7

LD50/oral/rat = > 5000 mg/kg Oral LD50 Rat  
LD50/oral/mouse = > 2000 mg/kg  
LD50/dermal/rabbit = No information available  
LD50/dermal/rat = No information available  
LC50/inhalation/rat = No information available  
LC50/inhalation/mouse = No information available  
Other LD50 or LC50 information = No information available

## Product Information

LD50/oral/rat =  
Value - Acute Tox = 12200 mg/kg

LD50/oral/mouse =  
Value - Acute Tox Oral = >2000 mg/kg

LD50/dermal/rabbit  
Value - Acute Tox = No information available

LD50/dermal/rat  
VALUE - Acute Tox Dermal = No information available

LC50/inhalation/rat  
VALUE-Vapor = No information available  
VALUE-Gas = No information available  
VALUE-Dust/Mist = No information available

LC50/Inhalation/mouse  
VALUE-Vapor = No information available  
VALUE - Gas = No information available  
VALUE - Dust/Mist = No information available

### Symptoms

**Skin Contact:** May cause skin irritation. It may cause mild skin irritation.

**Eye Contact:** Causes eye irritation. Mild eye irritation.

**Inhalation** May cause irritation of respiratory tract.

**Ingestion** Ingestion of very large quantities may cause gastrointestinal upset or indigestion. May cause nausea. May cause diarrhea.

**Aspiration hazard** No information available.

### Delayed and immediate effects as well as chronic effects from short and long-term exposure

**Chronic Toxicity** Prolonged or repeated ingestion may cause hypoglycemia. Prolonged or repeated ingestion may affect the liver, and kidneys.

**Sensitization:** No information available.

**Mutagenic Effects:** No information available

**Carcinogenic effects:** Not considered carcinogenic.

Component	CAS No	IARC	ACGIH - Carcinogens	NTP	OSHA HCS - Carcinogens	Australia - Notifiable Carcinogenic Substances	Australia - Prohibited Carcinogenic Substances
Curcumin	458-37-7	Not listed	Not listed	Not listed	Not listed	Not listed	Not listed

*ACGIH (American Conference of Governmental Industrial Hygienists)*

*IARC (International Agency for Research on Cancer)*

*NTP (National Toxicology Program)*

*OSHA (Occupational Safety and Health Administration of the US Department of Labor)*

**Reproductive toxicity** No data is available

**Reproductive Effects:** No information available

**Developmental Effects:** No information available

**Teratogenic Effects:** No information available

**Specific Target Organ Toxicity**

**STOT - single exposure** No information available.

**STOT - repeated exposure** No information available.

**Target Organs:** No information available.

## 12. ECOLOGICAL INFORMATION

### Ecotoxicity

**Persistence and degradability:** No information available

**Bioaccumulative potential:** No information available.

**Mobility in soil** No information available

**Other adverse effects** No information available.

## 13. DISPOSAL CONSIDERATIONS

### Disposal Methods

**Waste from residues / unused products:**

Waste must be disposed of in accordance with Federal, State and Local regulation.

**Contaminated packaging:**

Empty containers should be taken for local recycling, recovery or waste disposal

Component	CAS No	RCRA - F Series Wastes	RCRA - K Series Wastes	RCRA - P Series Wastes	RCRA - U Series Wastes
Curcumin	458-37-7	None	None	None	None

## 14. TRANSPORT INFORMATION

**DOT**

<b>UN-No:</b>	Not Regulated
<b>Proper Shipping Name:</b>	No information available
<b>Hazard Class</b>	No information available
<b>Subsidiary Class</b>	No information available
<b>Packing group:</b>	No information available
<b>Emergency Response Guide Number</b>	No information available
<b>Marine Pollutant</b>	No data available
<b>DOT RQ (lbs):</b>	No information available
<b>Special Provisions</b>	No Information available
<b>Symbol(s):</b>	No information available
<b>Description:</b>	No information available

**TDG (Canada)**

<b>UN-No:</b>	Not Regulated
<b>Proper Shipping Name:</b>	No information available
<b>Hazard Class</b>	No information available
<b>Subsidiary Risk:</b>	No information available
<b>Packing Group:</b>	No information available
<b>Marine Pollutant</b>	No Information available
<b>Description:</b>	No information available

**ADR**

<b>UN Number</b>	Not regulated
<b>Proper Shipping Name:</b>	No information available
<b>Transport hazard class(es)</b>	No information available
<b>Packing group</b>	No information available
<b>Subsidiary Risk:</b>	No information available

**IMDG**

<b>UN-No:</b>	Not Regulated
<b>Proper Shipping Name:</b>	No information available
<b>Hazard Class:</b>	No information available
<b>Subsidiary Risk:</b>	No information available
<b>Packing Group:</b>	No information available
<b>Marine Pollutant</b>	No information available

**RID**

<b>UN Number</b>	Not Regulated
<b>Proper Shipping Name:</b>	No information available
<b>Transport hazard class(es)</b>	No information available
<b>Subsidiary Risk:</b>	No information available
<b>Packing group</b>	No information available

**ICAO (air)**

<b>UN-No:</b>	Not Regulated
<b>Proper Shipping Name:</b>	No information available
<b>Hazard Class</b>	No information available
<b>Subsidiary Risk:</b>	No information available
<b>Packing Group:</b>	No information available

**IATA**

<b>UN Number</b>	Not Regulated
<b>Proper Shipping Name:</b>	No information available
<b>Transport hazard class(es)</b>	No information available
<b>Subsidiary Risk:</b>	No information available
<b>Packing group</b>	No information available
<b>Precautionary Statements -</b>	No information available



**Response  
Special Provisions**

No information available

**15. REGULATORY INFORMATION**

**International Inventories**

Component	CAS No	U.S. TSCA	KOREA KECL	Philippines (PICCS)	Japan ENCS	China IECSC	Australia (AICS)	EINECS-No.
Curcumin	458-37-7	PresentACTIVE	Present KE-03212	Present	Not present	Present	Present	Present 207-280-5

**U.S. Regulations**

*Curcumin*

**FDA - Food Additives Generally Recognized as Safe (GRAS):** 21 CFR 182.10,21 CFR 182.20

**FDA - 21 CFR - Total Food Additives** 101.22, 169.140, 169.150, 182.10, 73.600

- List Sourced from EAFUS

**California Prop. 65: Safe Drinking Water and Toxic Enforcement Act of 1986.**

**Chemicals Known to the State of California to Cause Cancer:**

This product does not contain a chemical requiring a warning under California Prop. 65. (See table below)

**Chemicals Known to the State of California to Cause Reproductive Toxicity:**

This product does not contain a chemical requiring a warning under California Prop. 65. (See table below)

Component	CAS No	Carcinogen	Developmental Toxicity	Male Reproductive Toxicity	Female Reproductive Toxicity:
Curcumin	458-37-7	Not Listed	Not Listed	Not Listed	Not Listed

**CERCLA/SARA**

Component	CAS No	CERCLA - Hazardous Substances and their Reportable Quantities	Section 302 Extremely Hazardous Substances and TPQs	Section 302 Extremely Hazardous Substances and RQs	Section 313 - Chemical Category	Section 313 - Reporting de minimis
Curcumin	458-37-7	None	None	None	None	None

**U.S. TSCA**

Component	CAS No	TSCA Section 5(a)2 - Chemicals With Significant New Use Rules (SNURS)	TSCA 8(d) -Health and Safety Reporting
Curcumin	458-37-7	Not Applicable	Not Applicable

**Canada**

**WHMIS 2015 - GHS Classifications**

WHMIS 2015 Hazard Classification Information:

Not a dangerous product according to HPR classification criteria.

**Canada Hazardous Products Regulation** This product has been classified according to the hazard criteria of the HPR (Hazardous Products Regulation) and the SDS contains all of the information required by the HPR

## DSL/NDSL

Component	CAS No	Canada (DSL)	Canada (NDSL)
Curcumin	458-37-7	Present	Not Listed

Component	CAS No	CEPA Schedule I - Toxic Substances
Curcumin	458-37-7	Not listed
Component	CAS No	CEPA - 2010 Greenhouse Gases Subject to Mandatory Reporting
Curcumin	458-37-7	Not listed

## EU Classification

### EU GHS - SV - CLP 1272/2008

Component	CAS No	EU GHS - SV - CLP (1272/2008)
Curcumin	458-37-7	

### EU - CLP (1272/2008)

#### R-phrase(s)

not determined (not applicable)

#### S -phrase(s)

none

Component	CAS No	Classification	Concentration Limits:	Safety Phrases
Curcumin	458-37-7		No information	

The product is classified in accordance with Annex VI to Directive 67/548/EEC

#### Indication of danger:

None

## 16. OTHER INFORMATION

**Preparation Date:** 2/6/2017  
**Revision date** 5/10/2019  
**Prepared by:** Sonia Owen

#### Disclaimer:

All chemicals may pose unknown hazards and should be used with caution. This Safety Data Sheet (SDS) applies only to the material as packaged. If this product is combined with other materials, deteriorates, or becomes contaminated, it may pose hazards not mentioned in this SDS. The physical properties reported in this SDS are obtained from the literature and do not constitute product specifications. Information contained herein does not constitute a warranty, whether expressed or implied, as to the safety, merchantability or fitness of the goods for a particular purpose. Spectrum Chemicals & Laboratory Products, Inc. assumes no responsibility for results obtained or for incidental or consequential damages, including lost profits, arising from the use of these data. No warranty against infringement of any patent, copyright or trademark is made or implied. It shall be the user's responsibility to develop proper methods of handling and personal protection based on the actual conditions of use. While this SDS is based on technical data judged to be reliable, Spectrum assumes no responsibility for the completeness or accuracy of the information contained herein.

**End of Safety Data Sheet**