



## SAFETY DATA SHEET

### 1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

**Product Name:** Creatistics Vegetable Dye Orange - 1 kg  
**Product Code:** AFS120 (11.120-01)

**Recommended Use:** Concentrated food colour for manufacturing use only. Dosage is 0.003 to 0.1%.

**Supplier:** Modern Teaching Aids Pty Ltd  
Level 1, 122 - 126 Old Pittwater Road, Brookvale, NSW, Australia 2100  
ABN 98 000 628 786  
Phone: AU - 1800 251 497 NZ - 0800 808 044  
Website: AU: [www.teaching.com.au](http://www.teaching.com.au) NZ: [www.teaching.co.nz](http://www.teaching.co.nz)  
Emergency Phone 24 hrs: AU - 13 11 26 NZ - 0800 764 766  
(Poisons Information Centre)

### 2. HAZARDS IDENTIFICATION

**Classification:** NON-HAZARDOUS SUBSTANCE, according to the criteria of Safe Work Australia NON-DANGEROUS GOODS, according to the ADG Code for transport by road and rail.

**Classification of the mixture:** Not classified as hazardous under any GHS hazard class.  
The following health/environmental hazard categories fall outside the scope of the Workplace Health and Safety Regulations:  
Not applicable

**Label elements:**

**Hazard pictogram(s):** None

**GHS SIGNAL WORD:** Not applicable

**HAZARD STATEMENT:** None

#### PREVENTION

P264: Wash contacted areas thoroughly after handling.

P280: Wear protective gloves/protective clothing/eye protection/face protection.

#### RESPONSE

P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P333+P313: If skin irritation or rash occurs: Get medical advice.

P370+P378: In case of fire, use carbon dioxide, dry chemical, foam, water fog.

#### STORAGE

P402+P404: Store in a dry place. Store in a closed container.

#### DISPOSAL

P501: If they can not be recycled, dispose of contents to an approved waste disposal plant and containers to landfill (see Section 13 of this SDS).

**Other hazards:** Dermal contact may discolor the skin due to dye characteristics. May form combustible dust concentrations in air. See Section 11 for toxicological information.

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

Amounts specified are typical and do not represent a specification.

CAS No	Chemical Name	Proportion	Hazard Codes
2783-94-0	Sunset yellow FCF (110) C.I. 15985	30-60%	Not applicable
Permitted food ingredients present at non-hazardous concentrations to 100%			

### 4. FIRST AID MEASURES

**Ingestion:** Rinse mouth thoroughly. If swallowed, give a glass of water to drink. If vomiting occurs give further water. Seek medical advice. Drink plenty of liquid to facilitate urinary excretion, and to relieve oedema and elevated blood pressure. Seek medical attention if irritation or symptoms persist.

**Eyes:** Immediately flush open eye with water for at least 15 minutes. Seek medical assistance if symptoms persist. Take care not to rinse contaminated water into the unaffected eye or onto the face. Obtain medical attention immediately. Take special care if exposed person is wearing contact lenses.

**Skin:** Immediately remove all contaminated clothing and launder before reuse. Wash affected areas thoroughly with soap and water. Seek medical attention if irritation or symptoms persist. Some dyes may temporarily stain skin.

**Inhalation:** Move the exposed person to fresh air. Seek medical attention if irritation or symptoms persist.

**Protection of first aid responders:** Wear proper personal protective clothing and equipment.

**Most important symptoms and effects, both acute and delayed:** Irritation, Skin discoloration due to dye. Pre-existing sensitization, skin and/or respiratory disorders or diseases may be aggravated. See section 11 for additional information.

**Indication of any immediate medical attention and special treatment needed, if necessary:** Treat Symptomatically.

### 5. FIRE-FIGHTING MEASURES

**Hazchem Code:** No Hazchem code allocated.

**Fire/Explosion Hazard:** Normally stable, non combustible and non flammable.

**Extinguishing Media/Apparatus:**

- **Suitable :** Water mist, foam, carbon dioxide or dry chemical.
- **Unsuitable:** Avoid hose streams or any method which will create dust clouds.

**Special hazards arising from the chemical:**

**Unusual fire/explosion hazards:** Concentrated dust/air combinations may produce explosive conditions. As with all organic dusts, fine particles suspended in air in critical proportions and in the presence of an ignition source may ignite and/or explode.

Dust may be sensitive to ignition by electrostatic discharge, electrical arcs, sparks, welding torches, cigarettes, open flame, or other significant heat sources. As a precaution, implement standard safety measures for handling finely divided organic powders. See Section 7 for suggested measures.

**Hazardous combustion products:** Irritating or toxic substances may be emitted upon burning, combustion or decomposition. It is therefore good practice to avoid inhalation of smoke and fumes and to wear suitable respiratory equipment in case of fire.

See section 10 (10.6 Hazardous decomposition products) for additional information.

**Special protective equipment and precautions for fire-fighters: Avoid hose streams or any method which will create dust clouds.**

In case of insufficient ventilation, wear suitable respiratory equipment, (AS/NZS 1716 & 1715, EN 143:2000 & 149:2001, ANSI Z88 or national equivalent) and approved protective clothing. Personnel without suitable respiratory protection must leave the area to prevent significant exposure to hazardous gases from combustion, burning or decomposition.

## 6. ACCIDENTAL RELEASE MEASURES

**Personal precautions, protective equipment and emergency procedures:** See Section 8 for recommendations on the use of personal protective equipment. If spilled in an enclosed area, ventilate. Avoid raising powdered material due to explosion hazard. Use spark-proof and explosion-proof equipment. If inhalation of dust cannot be avoided, wear an approved particulate respirator.

**Environmental Precautions:** Do not discharge directly into drains, into soil or into the aquatic environment.

### Methods for Cleaning Up:

**Note:** Use proper personal protective equipment to prevent skin and eye contact and breathing in dust when cleaning up as indicated in Section 8. Work up wind or increase ventilation.

Sweep powders carefully, using an absorbent sweeping compound to keep down the dust. Scoop material and absorbent into disposal drum and seal. Vacuum, then clean away any residual with water. Waste should be disposed of in accordance with section 13 of this document.

## 7. HANDLING AND STORAGE

**Precautions for safe handling:** As with any chemical product, use good laboratory/workplace procedures. Wash thoroughly after handling this product. Always wash up before eating, smoking or using the facilities. Use under well-ventilated conditions. Avoid eye contact. Avoid repeated or prolonged skin contact. Avoid drinking, tasting, swallowing or ingesting this product. Avoid routine inhalation of dust of any kind.

Exercise care when emptying containers, sweeping, mixing or doing other tasks which can create dust. Wash contaminated clothing before reuse.

Provide eyewash fountains and safety showers in the work area. As a precaution to control dust explosion potential, implement the following safety measures: Eliminate ignition sources (e.g., sparks, static buildup, excessive heat, etc.). In general, dust of organic materials is a static charge generator which may be ignited by electrostatic discharge, electrical arcs, sparks, welding torches, cigarettes, open flame, or other significant heat sources.

Prevent accumulation of dust (e.g., well-ventilated conditions, promptly vacuuming spills, cleaning overhead horizontal surfaces, etc.).

**Conditions for safe storage, including any incompatibilities:** Store cool and dry, under well-ventilated conditions. Store this material away from incompatible substances (see section 10). Do not store in open, unlabeled or mislabeled containers. Keep container closed when not in use. Product will absorb water vapor (hygroscopic).

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

**National Exposure Standard:** No value assigned for this specific material by Safe Work Australia. However, Exposure Standard(s) for particulates:

Dusts not otherwise classified: 8hr TWA = 10 mg/m<sup>3</sup> (for inspirable dust) and 3 mg/m<sup>3</sup> (for respirable dust)  
As published by Safe Work Australia

TWA - The time-weighted average airborne concentration over an eight-hour working day, for a five-day working week over an entire working life.

These Exposure Standards are guides to be used in the control of occupational health hazards. All atmospheric contamination should be kept to as low a level as is workable. These exposure standards should not be used as fine dividing lines between safe and dangerous concentrations of chemicals. They are not a measure of relative toxicity.

**Appropriate engineering controls:** Always provide effective general and, when necessary, local exhaust ventilation to draw dust away from workers to prevent routine inhalation. Ventilation must be adequate to maintain the ambient workplace atmosphere below the exposure limit(s) outlined in the SDS.

Eliminate ignition sources (e.g., sparks, static buildup, excessive heat, etc.). Prohibit flow of powder or dust through non-conductive ducts, vacuum hoses, or pipes, etc. Bond, ground, and properly vent conveyors, dust control devices and other transfer equipment.

**Individual protection measures, such as personal protective equipment:**

**Ingestion:** Do not eat, smoke or drink where product is handled, processed or stored.

**Eyes/face:** Protective eyewear, goggles or face shield is recommended to avoid accidental eye contact.

**Skin:** Protective clothing should be provided to avoid skin contact with this product. Gloves should be worn when handling. Always wash hands before smoking, eating, drinking or using the toilet. Wash contaminated clothing and other protective equipment before storage or re-use.

**Inhalation:** Effort should be made to control airborne levels of this product. Avoid generating and inhaling dusts. If excessive dust exists, wear dust mask/respirator meeting the requirements of AS/NZS 1715 and AS/NZS 1716.

**Further information:** Eyewash fountains and safety showers are recommended in the work area.

**9. PHYSICAL AND CHEMICAL PROPERTIES**

Appearance:	Fine, dry, dark orange red powder
Odour:	Odourless
pH:	Not applicable
Vapour pressure:	Not determined
Flash point:	Not applicable
Flammability:	Not flammable. May form combustible dust-air mixtures
Boiling point/boiling range:	Not determined
Freezing/melting point:	Not applicable. Solid at normal temperatures
Solubility:	Soluble in water
Bulk density:	No data available

**Other information:****Dust combustibility data:**

Minimum Autoignition temperature (dust cloud):	No data
Minimum Autoignition temperature (dust layer):	No data
Maximum pressure of explosion:	No data
Deflagration Index, Kst:	No data
Dust Hazard Class:	No data

**10. STABILITY AND REACTIVITY**

**Stability:** Product has good stability at ambient temperature.

**Reactivity:** None known.

**Conditions to Avoid:** Avoid dust formation direct sunlight, moisture and extremes in temperature.

**Incompatible materials:** Avoid contact with strong oxidisers, and concentrated sulphuric and nitric acids. May corrode ferrous-based equipment due to high salt content.

**Hazardous Decomposition Products:** CO, CO<sub>2</sub>, oxides of nitrogen, oxides of sulphur and other potential toxic fumes.

**11. TOXICOLOGICAL INFORMATION****Information on likely routes of exposure:**

**General:** Caution must be exercised through the prudent use of protective equipment and handling procedures to minimize exposure.

**Eyes:** Solid particles on the eye (powder/dust) may cause pain and be accompanied by irritation.

**Skin:** Repeated or prolonged skin contact may cause irritation. Repeated or prolonged skin contact may cause allergic reactions with susceptible persons.

**Inhalation:** Dust inhalation may cause respiratory irritation.

**Ingestion:** Ingestion may cause irritation.

**Acute toxicity information:** Not classified (based on available data, the classification criteria are not met). No toxicity studies have been conducted on this product.

**Skin corrosion/irritation:** Not classified (based on available data, the classification criteria are not met).

**Serious eye damage/irritation:** Not classified (based on available data, the classification criteria are not met).

**Respiratory or skin sensitization:** Not classified (based on available data, the classification criteria are not met).

**Carcinogenicity:** Not classified.

**Germ cell mutagenicity:** Not classified.

**Reproductive toxicity:** Not classified.

**Specific target organ toxicity (STOT) - single exposure:** Not classified.

**Specific target organ toxicity (STOT) - repeated exposure:** Not classified.

**Aspiration hazard:** Not classified

**Other toxicity information:** No additional information available.

## 12. ECOLOGICAL INFORMATION

This product has not been subjected to ecotoxicological testing as an entity. In view of the difficulty of using current standard ecotoxicological evaluation techniques to predict the impact of particular modes of release on vulnerable or localised parts of the ecosystem, this preparation should be considered and handled as if it displayed potential environmental hazard. That is, it should be treated in consequence with all possible precaution: Prevent from entering bodies of water. Expected to be biodegradable. Not expected to bio-accumulate.

**Ecotoxicity:** Freshwater Fish Toxicity: The acute LC50 is >100 mg/L based on component data. Freshwater Invertebrates

**Toxicity:** The acute EC50 is >1000 mg/L based on component data.

**Persistence and degradability:** Not readily biodegradable.

**Bioaccumulative potential:** Not expected to bioaccumulate.

**Mobility in soil:** Expected to be mobile in soil, as it is soluble in water.

**Other adverse effects:** No additional information available.

## 13. DISPOSAL CONSIDERATIONS

Residual quantities of the product should be treated according to the instructions given in sections 6, 7 and 8. Wastes should be eliminated according to federal, state and local regulatory requirements currently in force. Do not dispose of by means of sinks, drains, or in the immediate environment.

See Section 8 for recommendations on the use of personal protective equipment.

## 14. TRANSPORT INFORMATION

Classified as non-dangerous goods according to the ADG Code for transport by road and rail. In case of accidental spillage or fire during transport, refer to instructions given in sections 5, 6, 7 and 8. Not a hazardous material according to IATA or IMDG/MSBC

#### **UNO**

14.1 UN Number:	Not regulated
14.2 UN Proper shipping name:	N/A
14.3 Class:	----
14.4 Packing group:	---
14.5 Environmental hazards:	No

#### **Land transport (ADR/RID)**

14.1 UN Number:	Not regulated
14.2 UN Proper shipping name:	N/A
14.3 Class:	----
14.4 Packing group:	---
14.5 Environmental hazards:	No

#### **Sea transport (IMDG-Code)**

14.1 UN Number:	Not regulated
14.2 UN Proper shipping name:	N/A
14.3 Class:	----
14.4 Packing group:	---
14.5 Environmental hazards:	Not applicable
14.6 Special precautions for user:	Refer to section 7
14.7 Maritime transport in bulk according to IMO instruments:	Not applicable

#### **Air transport (ICAO-IATA)**

14.1 UN Number:	Not regulated
14.2 UN Proper shipping name:	N/A
14.3 Class:	----
14.4 Packing group:	---
14.5 Environmental hazards:	Not applicable
14.6 Special precautions for user:	Refer to section 7
14.7 Maritime transport in bulk according to IMO instruments:	Not applicable

### **15. REGULATORY INFORMATION**

**Classification:** NON-HAZARDOUS SUBSTANCE, according to the criteria of Safe Work Australia NON-DANGEROUS GOODS, according to the ADG Code for transport by road and rail.

**Classification of the mixture:** None

The following health/environmental hazard categories fall outside the scope of the Workplace Health and Safety Regulations: Not applicable

**Hazard pictogram(s):** None

**GHS SIGNAL WORD:** None

**HAZARD STATEMENT:** None

**Poisons Schedule Number:** No poisons schedule number allocated.

This product is not classified as a dangerous substance and hence labelling according to EC directives is not necessary. This product is listed on the following chemical inventories:

Australian Inventory of Chemical Substances (AICS)  
European Inventory of Existing Chemical Substances (EINECS)  
Japan Existing and New Chemical Substances (ENCS)  
Korean Existing and Evaluated Chemical Substances (KECL)  
New Zealand Inventory of Chemicals (NZIoC)  
Philippines Inventory of Chemicals and Chemical Substances (PICCS)  
Taiwan Inventory of Existing Chemicals  
U.S. Toxic Substances Control Act (TSCA)

## 16. OTHER INFORMATION

**Recommended Uses and Restrictions:** Concentrated colouring raw material. Not for personal use in this form or concentration. For manufacturing use only.

**Further Information:** Refer to specific advice provided in Product Information Sheets available from the manufacturer at the address indicated on page 1.

## REFERENCES:

1. Model code of practice for preparation of safety data sheets for hazardous chemicals. Safe Work Australia June 2023
2. Model Work Health and Safety Regulations released by Safe Work Australia 1st September 2024
3. Workplace Exposure Standards for Airborne Contaminants Safe Work Australia 18<sup>th</sup> January 2024
4. Classifying hazardous chemicals National Guide Safe Work Australia June 2023
5. Australian Code for Transport of Dangerous Goods by Road and Rail (ADG Code), Edition 7.9, July 2024. Refer Part 3 Dangerous Goods Lists Special Provisions and Limited Quantities Exception Special Provisions 144, p.460 and 223, p.465.
6. Globally Harmonised System of Classification and Labelling of Chemicals 7<sup>th</sup> Revised Edition 2017
7. <https://www.industrialchemicals.gov.au/chemical-information/search-assessments>
8. Labelling of Workplace Hazardous Chemicals, Code of Practice, Safe Work Australia, June 2023
9. [https://www.toxicology.org/pubs/statements/Flavorings-Related\\_Lung\\_Disease.pdf](https://www.toxicology.org/pubs/statements/Flavorings-Related_Lung_Disease.pdf)
10. Supplier Safety Data Sheets.

The information presented herein has been compiled from sources considered by the company, in good faith, to be dependable, accurate, and reliable to the best of our knowledge. However, since the use of this information and the conditions of use of the product are not within the control of AFIS, it is the user's responsibility to ultimately determine conditions of safe use of the product. AFIS assumes no responsibility for any liability or damages relating thereto for advising you regarding the protection of employees, customers or others.

END OF SDS