



KEDA DYE

SAFETY DATA SHEET

Keda Dye LLC
PO Box 1776
Manitowoc, WI 54221

HMIS RATINGS: HEALTH: 2 * FIRE: 1 REACTIVITY: 0 PERSONAL PROTECTION: F

Version 14

SECTION 1: PRODUCT IDENTIFICATION

Product I.D.: Product	Keda-Yellow-01
Name: Product	KEDA SUNFLOWER YELLOW
Description: C.I.	Yellow Dye Powder
Name:	Acid Yellow Dye
C.I. Number:	19140
Chemical Family:	Monoazo dyes 1934-
CAS Number:	21-0
Effective Date:	03/15/17

SECTION 2: HAZARD IDENTIFICATION AND EMERGENCY OVERVIEW

Emergency Overview:

Unprotected contact may cause possible allergic respiratory reaction in some individuals. May be eye and skin irritant.

Eye Contact:

Depending on duration and individual sensitivity, unprotected contact may cause moderate eye irritation, pain, redness, stinging sensation, swelling, watering, inflammation, itching, burning feeling and other effects. Heavy or prolonged contact may cause eye injury. Heated processing of liquids that creates mists or vapors may intensify effects. Follow all supervisor and Personal Protection instructions in Section 8 of this SDS.

Skin Contact:

Depending on amount of direct unprotected contact, possibility of irritation and allergic reactions in some individuals with redness, itching or other effects. Other delayed effects are possible, including rash. Prolonged or repeated contact may cause inflammation in some individuals. Follow section 8 protection precautions.

Inhalation:

Depending on duration and individual sensitivity, unprotected inhalation of dust, vapors, mists, or aerosols of product may cause irritation to nose, throat, lungs, and mucous membranes, and other effects. Although rare, ALLERGIC REACTIONS and/or ASTHMATIC EFFECTS are possible in some exposed individuals. As a precaution, call 911 IMMEDIATELY if exposed worker(s) experiences fainting, chest pain, asthmatic attack, lung spasms, tight chest, hard breathing, dizziness, cough, wheezing, itchy, runny or blocked nose, or other allergic respiratory or Central Nervous System symptoms. In rare cases effects can lead to shock or cardiovascular collapse, and may be life-threatening. Follow all protective instructions in section 8 of this SDS. As a precaution, persons known to be or suspected of being allergic to dyes or other chemicals should avoid any contact.

Ingestion:

Depending on amount swallowed, product can cause mild irritation of mouth, throat, esophagus, stomach, and gastrointestinal tract. Effects may include upset stomach, abdominal discomfort, nausea, vomiting, gastrointestinal disturbances, dizziness, diarrhea, or other effects. Aspiration into lungs during vomiting is an emergency and may cause lung injury and life-threatening conditions.

KEDA SUNFLOWER YELLOW

Medical Conditions Aggravated by Exposure:

Unprotected contact with product vapors, mists, aerosols, liquids, splashes or dusts may be cause of possible aggravation of pre-existing conditions or diseases of the respiratory system, skin, or eyes. Individuals with above-noted conditions or known or suspected chemical sensitivities or allergies should avoid working with chemicals.

Skin Sensitization:

Contact may cause possibility of skin sensitization in some individuals. Effects may include redness, swelling, itching, rash and hives. It may take repeated or prolonged contact to cause symptoms. Sensitization effects may be unpredictable. If symptoms appear, IMMEDIATELY REMOVE PERSON FROM AREA OF CONTACT and follow Section 4 instructions. In rare cases, if reaction becomes severe, GET IMMEDIATE MEDICAL ATTENTION, as a precaution. Persons known to have or suspected of having chemical sensitivity should not work with dyes or other chemicals.

Respiratory Sensitization:

Inadequate protection allowing inhalation of product dust, mist, vapor, etc. Possibility of respiratory sensitization or allergic reactions in some individuals. Symptoms may include: Itching or watery eyes, swelling of eyelids, sneezing, itchy, runny nose, cough, shortness of breath, asthma-like symptoms such as tight chest, difficult breathing. It may take repeated or prolonged exposure for symptoms to begin to appear. Reactions may be unpredictable and life-threatening for some individuals. IF SYMPTOMS APPEAR, IMMEDIATELY CALL 911 and remove person from contact area, IMMEDIATELY GET MEDICAL HELP and follow Section 4 instructions. Persons known to have or suspected of having chemical sensitivity or allergic reactions should avoid contact and working with dyes or other chemicals.

Special Warnings:

None for this material

Unusual Health Hazards:

None for this material

Supplemental Hazard Information:

Can cause respiratory and/or skin sensitization in individuals. See also Section 11.

Notes to Physician:

Treat Symptomatically based on Section 2 Hazard Warnings and Section 3 ingredients unless indicated otherwise

Cancer Information:

*** Not known to contain carcinogens ***

SECTION 3: OSHA HAZARDOUS INGREDIENTS

Component	CAS Number	Wt %	OSHA - PEL	ACGIH - TLV	Recommended PEL
C.I. Acid Yellow 23 (Technical grade)	1934-21-0	100.00%	Not established	Not established	Lowest possible exposure or zero with best PPE.

KEDA SUNFLOWER YELLOW

Important Notice:

Unprotected contact with ingredients listed in Section 3 may be hazardous based on OSHA 29 CFR 1910.1200 & related appendices. Components not listed are trade secrets, non-hazardous, or not reportable. This SDS is not intended to offer full disclosure, but all component information is available to medical or emergency personnel. All hazards are based on contact exposure. Effects may be unpredictable and may vary from person to person due to individual reactions. Reducing or eliminating contact can reduce or eliminate risk. Use protective equipment and clothing in Section 8 to minimize or eliminate contact. Users are responsible for hazard determination and communication. Unless indicated otherwise, non-carcinogenic components are indicated within a 1-10% range, and investigated or potential carcinogens within a 0.1-1% range. HMIS ratings are based on data interpretation, and vary from company to company. They are intended only for quick, general identification of the degree of potential hazards. Hazards range from 0 (Minimal) up to 4 (Severe). An asterisk (*) next to health rating indicates potential chronic hazard. Consult the National Paint & Coatings Association HMIS Manual for detailed information on ratings. To handle material safely, consider all information in this SDS.

SECTION 4: FIRST AID INSTRUCTIONS**Eye Contact:**

Immediately rinse with flowing water for at least 15 minutes while holding eyelids open. Get immediate medical attention, as a precaution. Have a copy of this Safety Data Sheet available.

Skin Contact:

Immediately remove contaminated clothing. Wash affected area with soap and rinse with plenty of water. Get medical attention, as a precaution. Have a copy of this Safety Data Sheet available.

Inhalation:

Immediately move person to fresh air. If breathing is difficult give oxygen, call 911 immediately. If person is experiencing a tight chest, lung spasms, or other breathing-related symptoms, or chest pain call 911 immediately. Calm and comfort the individual. If not breathing, immediately call 911, continue to give artificial respiration (CPR) until medical help arrives. Have this Safety Data Sheet printed out and available on hand.

Ingestion:

Do not induce vomiting unless directed to do so by a doctor or by other emergency medical personnel. Forced vomiting of certain chemicals may cause aspiration and lung damage. Have this Safety Data Sheet available.

SECTION 5: FIRE FIGHTING INSTRUCTIONS**Unusual hazards:**

None expected

Other Hazards:

None known

Types of Extinguishers:

CO2, dry chemical, foam, water fog or spray depending on type of fire

Fire Fighting Directions:

Wear self-contained breathing equipment and fire-proof clothing. Use water spray to cool fire exposed containers if they cannot be safely moved.

SECTION 6: ACCIDENTAL SPILL OR RELEASE INSTRUCTIONS**Special Precautions:**

None known. Follow general precautions shown below.

Reporting:

Check the applicable RQs in Section 15

Static Discharges:

IMPORTANT - FOR DYES CONTAINING FLAMMABLE SOLVENTS (Check section 3 for ingredients, section 5 or 9 for flash point, section 14 for transport classification). IF FLAMMABLE, GUARD AGAINST FIRE AND EXPLOSION: Take precautionary measures against static discharges when cleaning up leaks or spills of combustibles, flammables and powders. Containers should be properly grounded with metal straps, cables or other appropriate means to relieve static electricity build-up or generation. IMPORTANT: When using, mixing, filling, or otherwise dispensing any types of solvents, do not allow build-up of flammable or combustible vapors or vapor-air mixtures in confined spaces, storage tanks, or any other areas or enclosures. Totes, drums, pails, and all other containers should be completely sealed when not in use. Flammable vapors can travel a distance to ignition sources and cause fire or explosion. Take every precaution and monitor all safety factors and systems, including maintaining more-than-adequate air-exchange ventilation.

KEDA SUNFLOWER YELLOW

Environmental Protection:

Do not allow any unapproved, unmeasured colorant liquids, colorant dilutions, or colorant-related additives or dilutions to seep into drains, sewers, or surface waters. Check Sections 1, 2 and 3 for dye description or type, section 11 for any toxicity data, and section 15 for applicable state or federal regulations. Immediately dike liquid spills with inert absorbent material (sand, "Oil Dry" or other commercially available spill absorbent) to contain and soak up liquid. For powder spills, use sweeping compound, sawdust, or other appropriate material to carefully sweep up and contain dust. If possible, recover any uncontaminated materials to re-use. See also the Clean Up paragraph below in this section.

Protective equipment and clothing:

Wear all proper personal protective equipment and clothing to care for spill situation. See section 8 of this Safety Data Sheet.

Clean up:

After containing liquid spill by diking and soaking up with inert absorbent material, place in labeled container to be sealed for proper and regulated disposal. Only the slightest, most minimal residue should remain. Try to save uncontaminated material for reuse whenever possible. For powders, use sweeping compound to minimize dust and pick up as much product as possible. Solvent dye residue may be cleaned by scrubbing with detergent, depending on type. Do not add water to water-soluble dyes. Dye is concentrated. This will increase amount of color to remove. All cleaning or scrubbing liquids used should be absorbed and placed in labeled containers for correct disposal. Absorbent material containing solvents may release combustible or flammable vapors and should be handled accordingly, properly labeled and disposed. Check Sections 2, 5, 13 & 15 for applicable instructions and regulations

SECTION 7: HANDLING AND STORAGE**Warnings and Precautions:**

No special precautions anticipated. Wear all PPE in section 8 as a precaution, and avoid physical contact with material.

Personal Protection:

Wear ALL proper personal protective equipment as outlined in section 8 of this SDS.

Handling, Storage & Temperature Conditions:

GENERAL STORAGE: Keep containers tightly sealed in cool & dry area, out of direct sunlight. No product should be stored under extremely high or low temperatures. Ambient temperatures are best assurance for long-term color stability and quality. Outdoor storage of dyes and pigments is not recommended under any circumstances.

FIRE SAFETY: For products listing flammable or combustible solvents in section 3, and/or a low flash point in section 9, **GUARD AGAINST FIRE AND EXPLOSION:** Store away from fire hazards and ignition sources, high heat, open flames, welding, hot plates, steam pipes, radiators, etc. Maintain good ventilation. Guard against static discharges. Ground all containers before mixing or filling. Use non-sparking tools to open, close or otherwise work with containers. Limit indoor storage to approved areas with automatic sprinklers. Vapors expected to be released when material is heated during process operations.

STATIC CHARGES: Take precautionary measures against static discharges when mixing, cleaning, filling or otherwise dispensing combustible or flammable liquids. Containers should be properly grounded with metal straps, cables or other appropriate means to relieve static electricity build-up or generation.

VAPORS: IMPORTANT: DO NOT ALLOW buildup of flammable or combustible vapors or vapor-air mixtures in confined spaces, storage tanks, or any other areas or enclosures. Totes, drums and all other containers should be completely sealed when not in use. Vapors can travel a distance to ignition sources and cause fire or explosion. Take every precaution and monitor all safety factors and systems, including maintaining more-than-adequate air-exchange ventilation.

POWDERS: General precautions: Although unlikely in most instances, guard against dust explosion hazard. Eliminate or keep dust to a minimum. Under the right conditions, high dust concentrations of certain particle sizes mixed with air in a critical ratio in the presence of an ignition source can theoretically cause a dust explosion. Be sure to PROPERLY ground containers when filling, mixing or otherwise dispensing powders. KEEP WORK AREA CLEAN AND DUST-FREE. Follow all Section 8 recommendations for Exposure Controls and Personal Protection.

SHELF LIFE - LIQUIDS: Due to slow or minute evaporation, WATER-BASED colors may last for several months, a year, or longer if well sealed. SOLVENT-BASED colors (depending on vapor pressure, ambient temperature, additives, and other factors) may have a shelf life of six months, or less. There are many variables. As conditions are beyond our control, none of the above statements is a guarantee or warranty.

KEDA SUNFLOWER YELLOW

SHELF LIFE - POWDERS: When stored under the above stated, well-controlled conditions, most solid colors are expected to have a minimum shelf life of one year, and perhaps longer. Under ideal conditions it may be possible to store color for several years, without any appreciable loss of color strength, shade, or other qualities. There are many variables and exact time projections cannot be made. As conditions are beyond our control, none of the above statements is a guarantee or warranty.

All variables must be taken into account to estimate reasonable shelf-life. WATER-BASED

PRODUCTS: DO NOT ALLOW TO FREEZE.

SECTION 8: EXPOSURE CONTROLS AND PERSONAL PROTECTION**Note: Selecting protective equipment & clothing:**

When choosing personal protective equipment and clothing, consider each worker's environment, all chemicals being handled, temperature, ventilation, and all other conditions. Determination of the level of protection needed for the eyes, skin and respiratory system under working conditions is the responsibility of the product end-user or shift supervisor. Safety Data Sheet Sections 2, 3, 8 and 11 should be consulted.

Eye protection:

As a precaution, wear indirectly vented, splash-proof chemical safety goggles. When handling liquids, wear splash-proof goggles under a clear face-shield. Face shield is not to be used without these goggles. The type or extent of protection needed should be determined by the product end-user or shift supervisor.

Skin Protection:

Always wear impervious, chemical-resistant synthetic or rubber gloves. Check with manufacturer for best glove for the material being handled. Wear good quality long sleeved work shirt, coveralls, and a rubber or plastic apron. Wash hands after handling and before eating, drinking or using restroom. Shower after each shift. Clean contaminated but reusable protective equipment and clothing before reusing and wearing again. Discard contaminated disposable gloves and clothing. The type or extent of protection needed should be determined by the product end-user or shift supervisor.

Respiratory Protection:

Depending on type of material handled and processing conditions, the appropriate NIOSH approved air-purifying organic vapor/mist respirator or dust respirator (with proper pre-filters if required) should be worn as a precaution when any inhalation contact with product is possible. A properly selected, disposable NIOSH approved air-purifying mask may be acceptable (Check with the mask manufacturer). After each shift or when equipment becomes contaminated, clean the respirator and replace filters in compliance with 29 CFR 1910.134. Discard disposables as often as required. The type or extent of protection needed should be determined by the product end-user, shift supervisor or other appropriate on-site manager.

Eye Washes and Other Protection:

Eye wash stations and drench showers should be located within 100 feet or 10-second walk of the work area per ANSI standard Z358.1-1990.

Ventilation:

Local exhaust or other appropriate ventilation should be used to maintain exposure limits below specified amounts recommended by OSHA, NIOSH, or ACGIH and to draw spray, aerosol, vapors, or dusts away from workers and prevent routine inhalation. At least 10 air changes per hour are recommended for good room ventilation. IMPORTANT - GUARD AGAINST FIRE AND EXPLOSION: When using, mixing, filling, or otherwise dispensing any types of solvents, do not allow buildup of flammable or combustible vapors or vapor-air mixtures in confined spaces, storage tanks, or any other areas or enclosures. Totes, drums and all other containers should be completely sealed when not in use. Vapors can travel a distance to ignition sources and cause fire or explosion. Take every precaution and monitor all safety factors and systems, including maintaining more-than-adequate air-exchange ventilation.

Airborne Exposure Limits:

Not referenced in literature

KEDA SUNFLOWER YELLOW

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Orange-Yellow powder
% Total Solids:	100
Odor:	None
Melting Point:	Not established
Bulk Density:	0.93 g/ml
Solubility:	Water soluble. Test in particular applications.
pH:	Not established
Decomposition Temperature:	Not established
Specific Gravity:	Not established
Other Properties:	No further data

KEDA SUNFLOWER YELLOW

All Data shown above are typical values, not specifications.

SECTION 10: STABILITY AND REACTIVITY

Stability:

Product is expected to be stable under normal, ambient (controlled) conditions concerning heat, moisture, pressure, fire hazards, ignition hazards, and ventilation. If contact with incompatible or reactive materials is possibly hazardous or may cause a reaction, it is indicated below under hazardous reactions. Check all information.

Hazardous Polymerization:

Product will not undergo polymerization.

Conditions to Avoid:

Incompatibles. Protect from moisture.

Incompatible Materials:

Strong oxidizing agents. Molten active metals including aluminum & magnesium

Hazardous Decomposition Products:

Oxides of carbon, nitrogen, sulfur

Possible Hazard Reactions:

None known

SECTION 11: TOXICOLOGICAL INFORMATION

Component	Eye Effect	Skin Effect	Skin Sens	Resp Sens	Oral LD50	Inh LC50	Mutagen	Other Tox Data	Other Info
C.I. Acid Yellow 23 (Technical grade)	May be moderate irritant	May be irritant	No Data	No Data	Est. 3000 mg/kg (Rat)	No Data	No Data	Long-term dust inhalation may injure respiratory tract.	Allergic reactions, sensitivity noted as hives & asthma.

SECTION 12: ECOLOGICAL DATA

Component	AOX	Aquatic Tox	BOD	Biodeg.	COD	Ecotoxicity	Sewage	Other Test Data	Other Info
C.I. Acid Yellow 23 (Technical grade)	No Data	May be harmful to freshwater aquatic species and plants	No Data	No Data	No Data	No Data	No Data	No Data	No Data

SECTION 13: DISPOSAL AND ENVIRONMENTAL CONSIDERATION

Reuse of materials:

Reclaim all uncontaminated material to reuse, recycle or otherwise rework whenever possible.

Contain - Do not release:

Do not release into sewers, water systems, ground systems or ecosystems without proper authorization.

Disposal Methods:

Incinerate, treat, or bury (landfill), after sampling and testing, at facility approved by applicable federal, state, and local authorities.

Empty Containers:

Empty containers may contain residue and/or vapors and should not be reused unless professionally cleaned and reconditioned. Crush if not cleaned, to prevent reuse.

KEDA SUNFLOWER YELLOW

Applicable Regulations: See Section 15 if regulated**Special Instructions:** See Section 15 if regulated**SECTION 14: SHIPPING AND TRANSPORTATION INFORMATION****DOT Regulations (Ground):**

NOT REGULATED

IATA Regulations (Air):

NOT REGULATED

IMDG / IMO Regulations (Water):

NOT REGULATED

SECTION 15: REGULATORY INFORMATION**FEDERAL AND STATE LISTS**

Component	CAS Number	Weight %	Regulatory List
C.I. Acid Yellow 23 (Technical grade)	1934-21-0	100.00%	No listings known to be applicable.

SARA 311/312 Hazard Categories:

Immediate/Acute Health Hazard:	YES
Chronic/Delayed Hazard:	YES
Fire Hazard:	NO
Sudden Release of Pressure Hazard:	NO
Reactivity Hazard:	NO

GLOBAL CHEMICAL REGISTRATION LISTINGS:

AICS (Australia):	Components listed
DSL (Canada):	Components listed
ECL (Korea):	Components listed
EINECS (Europe):	Components listed
ENCS (Japan):	Components listed
IECSC (China):	Components listed
NZIoC (New Zealand):	Components listed
PICCS (Phillippines):	Components listed
TSCA (US):	Components listed

OTHER LISTINGS:

Other national or regional registrations not yet determined.

KEDA SUNFLOWER YELLOW

SECTION 16: OTHER INFORMATION

Reason for Revision: General review
Reviewed: 03/15/17

Disclaimer:

All necessary precautions should be followed to protect against any hazards described on this sheet, as well as unforeseen or unexpected individual sensitivities or unanticipated allergic reactions. Other potential, unknown hazards may exist. The information and recommendations contained herein are based upon data believed to be correct at the time of publication. However, due to factors beyond our control, no guarantee or warranty of any kind, expressed or implied, is made with respect to the information contained herein. Expected hazards and properties may change when product is used with other materials under varying research or processing conditions. It is the responsibility of the product user to determine if information on this sheet is applicable to their particular needs. This Safety Data Sheet was prepared to comply with the U.S. OSHA Hazard Communication Standard 29 CFR 1910.1200, and with most international GHS recommendations. This dated copy supersedes any previous information. Previously dated sheets are invalid and inapplicable and should be deleted and/or destroyed to avoid confusion.

END OF SDS