Quinoline Yellow

Version number: GHS 1.0 Date of compilation: 08/19/2017

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1 Product identifier

Identification of the substance	**C.I. Acid Yellow 3**
RTECS No	GC5796000
CAS number	8004-92-0
Other means of identification	
Item code(s)	D2378P
1.1.6.3 Dye classification:	Quinophthalone

1.2 Relevant identified uses of the substance or mixture and uses advised against

Identified uses	Dye Industrial use Professional use
Uses advised against	Not for use with foodstuffs, pharmaceutical products or cosmetics. This product is for industrial and professional use only, It is not intended for household use.

1.3 Details of the supplier of the safety data sheet

Robert Koch Industries, Inc.
4770 N. Harback Road
Bennett CO 80102 United States

Telephone: 1.303.644.3763
Telefax 1.303.644.3045
Normal business hours: Monday - Friday, 0800 - 1700 Mountain Time
e-mail: sales@kochcolor.com
Website: www.kochcolor.com

Competent person responsible for the safety data sheet	Mark Koch
e-mail (competent person)	sds@kochcolor.com

1.4 Emergency telephone number

Emergency information service	**1.800.535.5053** Infotrac (24 hours) Outside of USA or Canada, call +1-352-323-3500.

SECTION 2: Hazards identification

2.1 CLASSIFICATION OF THE SUBSTANCE OR MIXTURE

Classification acc. to OSHA "Hazard Communication Standard" (29 CFR 1910.1200)

Section	Hazard class	Category	Hazard statement
B.cD	Combustible dust	Cat. Comb. Dust	OSHA003
A.1O	Acute toxicity (oral)	Cat. 4	H302

Remarks
For full text of H-phrases: see SECTION 16.

2.2 LABEL ELEMENTS

Labelling according to GHS

Signal word **Warning**

Pictograms

GHS07

Hazard statements

Hazard statements	
Code	**Hazard statement**
H302	Harmful if swallowed.
OSHA003	May form combustible dust concentrations in air.

Precautionary statements

Precautionary statements - prevention

Code	Precautionary statements - prevention
P264	Wash thoroughly after handling.
P270	Do not eat, drink or smoke when using this product.

Precautionary statements - response

Code	Precautionary statements - response
P301+P330+P312	IF SWALLOWED: Rinse mouth. Call a POISON CENTER/doctor...if you feel unwell.

Precautionary statements - disposal

Code	Precautionary statements - disposal
P501	Dispose of contents/container according to applicable international, national, federal, state, and local regulations.

2.3 Other hazards

May cause eye irritation.Dermal contact may temporarily color the skin due to dye characteristics.Accidental ingestion may cause irritation in the digestive tract. Prolonged or repeated contact may irritate the skin, causing dermatitis in sensitive individuals.

SECTION 3: Composition/information on ingredients

3.1 Substances

Name of substance	C.I. Acid Yellow 3
IUPAC name	1H-Indene-1,3(2H)-dione, 2-(2-quinolinyl)-, sulfonated, sodium salts
RTECS No	GC5796000
CAS number	8004-92-0
Molecular formula	C18H9NO8S2Na2
Molar mass	477.4 $^{g}/_{mol}$

SECTION 4: First aid measures

4.1 DESCRIPTION OF FIRST AID MEASURES

General notes

Remove contaminated clothing and launder before reuse. In all cases of doubt, or when symptoms persist, seek medical advice.

Following inhalation

If inhalation of dust, fumes or vapor causes irritation, remove person to fresh air and keep comfortable. If irritation continues get medical attention.

Following skin contact

Wash the affected area thoroughly with soap and water. Get medical attention if symptoms occur.

Following eye contact

Immediately flush eyes with plenty of clean water for an extended time, not less than fifteen (15) minutes. Flush longer if there is any indication of residual chemical in the eye. Ensure adequate flushing of the eyes by separating the eyelids with fingers and roll eyes in a circular motion. Get medical attention.

Following ingestion

Rinse mouth with water. Treat symptomatically. Get medical attention if you feel unwell.Never give anything by mouth to an unconscious person.

4.2 Most important symptoms and effects, both acute and delayed

Individuals with pre-existing skin disorders, eye problems or impaired respiratory function may be more susceptible to the effects of this substance.

4.3 Indication of any immediate medical attention and special treatment needed

In case of any adverse symptoms following exposure, seek medical attention.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media

Foam, Carbon dioxide (CO2), Dry chemical, Water

Unsuitable extinguishing media

Water jet, avoid any method which will create dust clouds.

5.2 Special hazards arising from the substance or mixture

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. Concentrated dust/air combinations may produce explosive conditions under certain parameters. 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. Refer to Section 7.1.

5.2.1 Hazardous combustion products

nitrogen oxides (NOx), carbon monoxide (CO), carbon dioxide (CO2), sulphur oxides (SOx)

5.3 Advice for firefighters

Avoid hose streams or any method which will create dust clouds. Personnel without suitable respiratory protection must leave the area to prevent significant exposure to hazardous gases from combustion, burning or decomposition. In an enclosed or poorly ventilated area, wear SCBA during cleanup immediately after a fire as well as during the attack phase of firefighting operations.

Special protective equipment for firefighters

Boots. Footwear protecting against chemicals. Chemical resistant gloves. Chemical protection suit. Eye and face protection. Self-contained breathing apparatus (SCBA).

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

If spilled in an enclosed area, provide ventilation to reduce dusting conditions. When airborne dust is present, use spark-proof and explosion-proof equipment. To avoid inhalation of dust, wear an approved particulate respirator. Wear personal Protective Equipment (PPE) specified in Section 8 of this SDS.

6.2 Environmental precautions

Prevent spilled material from entering public sewer systems, rivers, lakes, streams and other surface waters. Retain all contaminated materials and rinse water and dispose of according to any applicable Federal, State or Local laws.

6.3 Methods and material for containment and cleaning up

Advices on how to contain a spill

Contain spill. Wear proper personal protective clothing and equipment. Use care to avoid dust generation. Vacuum or sweep into a closed container for reuse or disposal. If vacuuming, use only an approved industrial vacuum. Place recovered waste into labeled, closed container(s). Store in a safe location to await disposal. Change contaminated clothing and launder before reuse.

6.4 Reference to other sections

Hazardous combustion products: see section 5. Personal protective equipment: see section 8. Incompatible materials: see section 10. Disposal considerations: see section 13.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Recommendations

Measures to prevent fire as well as aerosol and dust generation

Use local and general ventilation. Take precautionary measures against static discharge. Only vacuum cleaners containing no ignition sources may be used for combustible dusts. Use explosion-proof electrical/ventilating/lighting equipment. Use only non-sparking tools. 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 an eyewash fountain/kit in the work area. A safety shower is recommended. 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. Use spark-proof tools and equipment. Properly ground equipment. Good housekeeping and controlling of dusts are necessary for safe handling of product. Prevent accumulation of dust on floors, shelves, surface areas, equipment, containers etc.

Advice on general occupational hygiene

Wash hands after use. Do not eat, drink and smoke in work areas. Remove contaminated clothing and protective equipment before entering eating areas. Never keep food or drink in the vicinity of chemicals. Never place chemicals in containers that are normally used for food or drink. Keep away from food, drink and animal feedingstuffs.

7.2 Conditions for safe storage, including any incompatibilities

Store in a cool and dry location with good ventilation. Store away from incompatible substances (see section 10). Do not store in open, unlabeled or mislabeled containers. Keep container closed when not in use. Protect from strong light.

Ventilation requirements

Use general and local ventilation to minimize airborne dust.

7.3 Specific end use(s)

See section 16 for a general overview.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

National limit values

Occupational exposure limit values (Workplace Exposure Limits)

Country	Name of agent	CAS No	Notation	Identifier	TWA [ppm]	TWA [mg/m³]	STEL [ppm]	STEL [mg/m³]	Source
US	particulates not otherwise regulated (PNOR)		i, dust	PEL	1,766	15			29 CFR 1910.1000
US	particulates not otherwise regulated (PNOR)		partml, r, dust	PEL	529.5	5			29 CFR 1910.1000

Notation

dust	As dust.
i	Inhalable fraction.
partml	Particles/ml.
r	Respirable fraction.
STEL	Short-term exposure limit: a limit value above which exposure should not occur and which is related to a 15-minute period unless otherwise specified.
TWA	Time-weighted average (long-term exposure limit): measured or calculated in relation to a reference period of 8 hours time-weighted average.

Relevant DNELs/DMELs/PNECs and other threshold levels

No data available.

8.2 Exposure controls

Appropriate engineering controls

Always provide effective exhaust ventilation to prevent the formation of a dust cloud and to draw dust away from workers so as to prevent routine inhalation. Ventilation must be adequate to maintain the ambient workplace atmosphere below any applicable exposure limit(s) outlined in the SDS. In areas where airborne dust is likely, eliminate ignition sources (e.g., sparks, static buildup, excessive heat, etc.). Ventilation guidelines/techniques may be found in publications such as Industrial Ventilation: American Conference of Governmental Industrial Hygienists, 1330 Kemper Meadow Drive, Cincinnati, OH, 45240-1634, USA.) (http://www.acgih.org/home.htm).

Individual protection measures (personal protective equipment)

Eye/face protection

Work with safety glasses.

Skin protection

• Hand protection

In the case of wanting to use the gloves again, clean them before taking off and air them well.

• Other protection measures

Use good laboratory/workplace procedures including personal protective clothing such as shoe covers, boots, lab coat, or apron. During prolonged use or when handling larger quantities protective coveralls with hoods are recommended. Have an eyewash fountain/kit present in the work area. A safety shower is recommended.

Respiratory protection

In case of insufficient ventilation, wear suitable respiratory equipment. If inhalation of dust, mist, or vapor is possible, wear an approved respirator in accordance with manufacturer's use limitations and OSHA standard 1910.134 (29CFR).

Environmental exposure controls

Use appropriate container to avoid environmental contamination. Keep away from drains, surface and ground water.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance

Physical state	solid (powder)
Colour	yellow - dark yellow - amber
Odour	odourless

Other physical and chemical parameters

pH (value)	
Melting point/freezing point	not determined
Initial boiling point and boiling range	not determined
Flash point	not applicable
Evaporation rate	not determined
Flammability (solid, gas)	this material is combustible, but will not ignite readily
Explosion limits of dust clouds	not determined
Vapour pressure	not determined
Density	not determined
Bulk density	0.55 – 0.75 $^{g}/_{cm^3}$
Relative density	Information on this property is not available.
Solubility(ies)	0.4 $^{g}/_{l}$ (ethanol)
Water solubility	6 $^{g}/_{l}$ at 20 °C
Partition coefficient	
n-octanol/water (log KOW)	this information is not available
Auto-ignition temperature	not determined
Viscosity	not relevant (solid matter)
Explosive properties	dust explosion hazards
Oxidising properties	none

9.2 Other information

Solid content	100 %

SECTION 10: Stability and reactivity

10.1 Reactivity

This material is not reactive under normal ambient conditions.

10.2 Chemical stability

The material is stable under normal ambient and anticipated storage and handling conditions of temperature and pressure.

10.3 Possibility of hazardous reactions

Hazardous polymerization will not occur.

10.4 Conditions to avoid

Avoid conditions that create dust.

10.5 Incompatible materials

Avoid contact with strong oxidizing agents - strong acids - strong bases

10.6 Hazardous decomposition products

Hazardous combustion products: see section 5.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

11.1.3 Classification acc. to OSHA "Hazard Communication Standard" (29 CFR 1910.1200)

Acute toxicity

Harmful if swallowed.

Acute toxicity estimate (ATE)

oral 2,000 $^{mg}/_{kg}$

Exposure route	Endpoint	Value	Species	Source
oral	LD50	2,000 $^{mg}/_{kg}$	rat	Scientia Pharmaceutica. Vol. 47, Pg. 39, 1979. / BIBRA Toxicology profile of quinoline Yellow (1990)
oral	LD50	5,000 $^{mg}/_{kg}$	rat	DFG-Kosmetischen Färbemittel, VCH- Verlagsgesellschaft mbH, Weinheim, 1991

Skin corrosion/irritation

Shall not be classified as corrosive/irritant to skin.

Serious eye damage/eye irritation

Shall not be classified as seriously damaging to the eye or eye irritant.

Respiratory or skin sensitisation

Shall not be classified as a respiratory or skin sensitiser.

Summary of evaluation of the CMR properties

Shall not be classified as germ cell mutagenic, carcinogenic nor as a reproductive toxicant.

• OSHA Carcinogens (United States) (Substance) Not listed

Specific target organ toxicity (STOT)

Shall not be classified as a specific target organ toxicant.

Aspiration hazard

Shall not be classified as presenting an aspiration hazard.

Information on likely routes of exposure

Inhalation. Ingestion. Dermal (skin contact). Eye contact.

SECTION 12: Ecological information

12.1 Toxicity

Shall not be classified as hazardous to the aquatic environment.

Aquatic toxicity (acute)

Aquatic toxicity (acute)				
Endpoint	**Value**	**Species**	**Source**	**Exposure time**
LC50	1,000 $^{mg}/_{l}$	japanese ricefish/medaka (Oryzias latipes)	Tonogai,Y., S. Ogawa, Y. Ito, and M. Iwaida; 1982, J.Toxicol. Sci.7(3): 193203	48 h

12.2 Persistence and degradability

Data are not available.

12.3 Bioaccumulative potential

Data are not available.

12.4 Mobility in soil

Data are not available.

12.5 Results of PBT and vPvB assessment

Data are not available.

12.6 Other adverse effects

Data are not available.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Dispose of contents/container in accordance with local/regional/national/international regulations.

Sewage disposal-relevant information

Do not empty into drains. Avoid release to the environment. Refer to special instructions/safety data sheets.

Waste treatment of containers/packagings

Completely emptied packages can be recycled. Handle contaminated packages in the same way as the substance itself.

SECTION 14: Transport information

14.1	UN number	(Not subject to transport regulations)
14.2	UN proper shipping name	Not relevant
14.3	Transport hazard class(es)	None
	Class	-
14.4	Packing group	Not relevant
14.5	Environmental hazards	None (Non-environmentally hazardous acc. to the dangerous goods regulations)

14.6 Special precautions for user
There is no additional information.

14.7 Transport in bulk according to Annex II of MARPOL and the IBC Code

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

15.1.2 NATIONAL REGULATIONS (UNITED STATES)

Toxic Substance Control Act (TSCA)	Substance is listed
Superfund Amendment and Reauthorization Act (SARA TITLE III)	
The List of Extremely Hazardous Substances and Their Threshold Planning Quantities (EPCRA Section 302, 304)	Not listed None of the ingredients are listed
Specific Toxic Chemical Listings (EPCRA Section 313):	None of the ingredients are listed
Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA)	
List of Hazardous Substances and Reportable Quantities (CERCLA section 102a) (40 CFR 302.4)	Not listed
Clean Air Act	Not listed
Drug precursors, Controlled Substances Act (21 U.S.C. § 802)	Not listed

Industry or sector specific available guidance(s)

NFPA® 704

National Fire Protection Association: Standard System for the Identification of the Hazards of Materials for Emergency Response

Category	Degree of hazard	Description
Flammability	1	Material that must be preheated before ignition can occur.
Health	1	Material that, under emergency conditions, can cause significant irritation.
Instability	0	Material that is normally stable, even under fire conditions.
Special hazard		

Right to Know Hazardous Substance List	Not listed
Proposition 65 List of chemicals	Not listed substance

15.1.3 Relevant European Union (EU) safety, health and environmental provisions

15.1.3. Classification according to GHS (1272/2008/EC, CLP)
1

Hazard class	Category	Hazard class and category
acute toxicity (oral)	4	(Acute Tox. 4)

National inventories

Country	Inventory	Status
AU	AICS	substance is listed
CA	DSL	substance is listed
CN	IECSC	substance is listed
EU	ECSI	substance is listed
JP	CSCL-ENCS	substance is listed
KR	KECI	substance is listed
MX	INSQ	substance is listed
NZ	NZIoC	substance is listed
PH	PICCS	substance is listed
TR	CICR	substance is listed
TW	TCSI	substance is listed
US	TSCA	substance is listed

Legend

AICS	Australian Inventory of Chemical Substances.
CICR	Chemical Inventory and Control Regulation.
CSCL-ENCS	List of Existing and New Chemical Substances (CSCL-ENCS).
DSL	Domestic Substances List (DSL).
ECSI	EC Substance Inventory (EINECS, ELINCS, NLP).
IECSC	Inventory of Existing Chemical Substances Produced or Imported in China.
INSQ	National Inventory of Chemical Substances.
KECI	Korea Existing Chemicals Inventory.
NZIoC	New Zealand Inventory of Chemicals.
PICCS	Philippine Inventory of Chemicals and Chemical Substances.
TCSI	Taiwan Chemical Substance Inventory.
TSCA	Toxic Substance Control Act.

SECTION 16: Other information

Abbreviations and acronyms

Abbr.	Descriptions of used abbreviations
29 CFR 1910.1000	29 CFR 1910.1000, Tables Z-1, Z-2, Z-3 - Occupational Safety and Health Standards: Toxic and Hazardous Substances (permissible exposure limits)
CAS	Chemical Abstracts Service (service that maintains the most comprehensive list of chemical substances)
CLP	Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures
CMR	Carcinogenic, Mutagenic or toxic for Reproduction
DMEL	Derived Minimal Effect Level
DNEL	Derived No-Effect Level
EINECS	European Inventory of Existing Commercial Chemical Substances
ELINCS	European List of Notified Chemical Substances

Abbr.	Descriptions of used abbreviations
GHS	"Globally Harmonized System of Classification and Labelling of Chemicals" developed by the United Nations
IUPAC	International Union of Pure and Applied Chemistry
MARPOL	International Convention for the Prevention of Pollution from Ships (abbr. of "Marine Pollutant")
NFPA® 704	National Fire Protection Association: Standard System for the Identification of the Hazards of Materials for Emergency Response
NLP	No-Longer Polymer
OSHA	Occupational Safety and Health Administration (United States)
PBT	Persistent, Bioaccumulative and Toxic
PEL	Workplace exposure limit
PNEC	Predicted No-Effect Concentration
ppm	Parts per million
RTECS	Registry of Toxic Effects of Chemical Substances (database of NIOSH with toxicological information)
STEL	Short-term exposure limit
TWA	Time-weighted average
vPvB	Very Persistent and very Bioaccumulative

Key literature references and sources for data

- OSHA Hazard Communication Standard (HCS), 29 CFR 1910.1200
- 49 CFR § 172.101 Hazardous Materials Table (DOT)

List of relevant phrases (code and full text as stated in chapter 2 and 3)

Code	Text
H302	Harmful if swallowed
OSHA003	May form combustible dust concentrations in air

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This Safety Data Sheet (SDS) cannot cover all possible situations which the user may experience during use of this product. Each aspect of your operation should be examined to determine if, or where, additional precautions may be necessary. All health and safety information contained in this bulletin should be provided to your employees or customers. It is your responsibility to develop appropriate work practice guidelines and employee instructional programs for your operation.