Fluorosol GR 7200

Version number GHS 1.0

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SECTION 1: Identification

1.1 Product Indentifier(s).

Identification of the substance — **C.I. Solvent Yellow 43**

Trade name(s) — Fluorosol GR 7200
Fluorescent Yellow 7517

CAS number — 19125-99-6

Other means of identification

Alternative name(s) — 2-butyl-6-(butylamino)-1H-benz[de]isoquinoline-1,3(2H)-di-one
C.I. Solvent Yellow 116

Product code(s) — D7200
D7517
D7200P

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

Relevant identified uses — Dye
Industrial use
Professional use
Marker, Tracer Colorant

Uses advised against — Do not use for products which come into contact with food-stuffs. Do not use for private purposes (household). 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
Fax. +1 303.644.3045
Normal business hours: 0800 - 1700 MST/DST (UTC-7)
e-mail: sales@kochcolor.com.
Website. www.kochcolor.com.

e-mail (competent person) — sales@kochcolor.com
(Mark Koch)

1.4 Emergency telephone number

Emergency information service — 1.800.535.5053 Infotrac (24 hours) USA and Canada
Outside of USA or Canada, call +1 352.323.3500

SECTION 2: Hazard(s) 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 class and category	Hazard statement
B.cD	Combustible dust.	Comb. Dust	CD	OSHA003

Supplemental hazard information

Code	Supplemental hazard information
HNOC008	Very toxic to aquatic life with long lasting effects (GHS category 1: aquatic toxicity - acute and/or chronic)

For full text of abbreviations: see SECTION 16.

2.2 Label elements

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

Signal word **Warning**

Pictograms

GHS09

Hazard statements

OSHA003 May form combustible dust concentrations in air.

Precautionary statements

P273 Avoid release to the environment.

P501 Dispose of contents/container according to applicable federal, state, and local regulations.

2.3 Other hazards

Dust explosion hazards.

Hazards not otherwise classified

Very toxic to aquatic life with long lasting effects (GHS category 1: aquatic toxicity - acute and/or chronic).

Results of PBT and vPvB assessment

According to the results of its assessment, this substance is not a PBT or a vPvB.

SECTION 3: Composition/information on ingredients

3.1 Substances

Name of substance	C.I. Solvent Yellow 43
Identifiers	
CAS No	19125-99-6
Molecular formula	$C_{20}H_{24}N_2O_2$
Molar mass	324.4 $^{g}/_{mol}$

SECTION 4: First-aid measures

4.1 Description of first- aid measures

General notes

If irritation or symptoms occur from any route of exposure, remove the affected individual from the area. Remove contaminated clothing and launder before reuse. In all cases of doubt, or when symptoms persist, seek medical advice.

Following inhalation

If inhalation causes irritation, remove to fresh air. If symptoms persist, get medical advice/attention.

Following skin contact

Brush off loose particles from skin. Wash with plenty of soap and water.

Following eye contact

Flush eyes with clean water. Remove contact lenses if safe to do so. Continue rinsing for at least 15 minutes. Get medical advice/attention.

Following ingestion

Rinse mouth with water. Do NOT induce vomiting unless instructed to do so by medical personnel. Never give anything by mouth to an unconscious person. Get medical advice/attention if symptoms occur or if the affected person does not feel well.

4.2 Most important symptoms and effects, both acute and delayed

Dermal contact may temporarily discolor skin due to dye characteristics.

4.3 Indication of any immediate medical attention and special treatment needed

None known. Treat symptomatically.

SECTION 5: Fire-fighting measures

5.1 Extinguishing media

Suitable extinguishing media

In case of fire use water fog, foam, carbon dioxide (CO2), dry chemical.

Unsuitable extinguishing media

Avoid water jet, hose streams, or any method which will create dust clouds.

5.2 Special hazards arising from the substance or mixture

Danger of dust explosion. Deposited combustible dust has considerable explosion potential. 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.

Hazardous combustion products

Nitrogen oxides (NOx). Carbon monoxide (CO). Carbon dioxide (CO2). Irritating or toxic substances may be emitted upon burning, combustion or decomposition.

5.3 Advice for firefighters

In case of fire and/or explosion do not breathe fumes. Coordinate firefighting measures to the fire surroundings. Do not allow firefighting water to enter drains or water courses. Collect contaminated firefighting water separately. Fight fire with normal precautions from a reasonable distance.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Remove persons to safety. Follow emergency procedures such as the need to evacuate the area, notify authorities or to consult an expert. Keep unnecessary personnel away. Wear personal protective equipment to prevent injury. See section 8 of this SDS. Ensure adequate ventilation.

6.2 Environmental precautions

If substance has entered a water course or sewer, inform the responsible authority. Do not flush product down drains that discharge into public sewer systems. Do not pour onto the ground. Do not release into surface waters such as lakes, rivers and streams. Dispose of unusable product, wash water, and contaminated materials properly. See section 13 for disposal considerations.

6.3 Methods and materials for containment and cleanup

Take up mechanically.

Cover floor drains. Prevent spilled material from leaving the area if safe to do so. Use care to avoid dust generation. vacuum or carefully sweep into a closed container for reuse or disposal. Only use an approved industrial vacuum cleaner.
Suitable absorbent material(s) include:
Collect spilled material and place into suitable container(s) for reuse or disposal. Label containers appropriately.

Other information relating to spills and releases

Place in appropriate containers for disposal. Ventilate affected area.

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. Use only in well-ventilated areas. Only vacuum cleaners containing no ignition sources may be used for combustible dusts. Ground/bond container and receiving equipment. Use explosion-proof electrical/ventilating/lighting/equipment. Use only non-sparking tools.

Specific notes/details

There is a risk of a dust explosion if powdered combustible dust is present in high-enough concentrations. Dust deposits can accumulate on surfaces in working area. Dust deposits have the potential to form an explosive dust-air mixture if disturbed. Carefully remove accumulated dust from surface areas on a regular basis. Only vacuum cleaners containing no ignition sources may be used for combustible dusts.

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

Managing of associated risks

Explosive atmospheres

Avoid generation of dust.Removal of dust deposits. Only vacuum cleaners containing no ignition sources may be used for combustible dusts.

Ventilation requirements

Use local and general ventilation. Ground/bond container and receiving equipment.

7.3 Specific end use(s)

See section 16 for a general overview.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Occupational exposure limit values (Workplace Exposure Limits)

Country	Name of agent	CAS No	Identifier	TWA [ppm]	TWA [mg/m³]	Notation	Source
US	Particulates not otherwise classified		REL			Appx-D	NIOSH REL
US	Particulates not otherwise classified (PNOC)		PEL	1,766	15	I, dust	29 CFR 1910.1000
US	Particulates not otherwise classified (PNOC)		PEL	529.5	5	Partml, r, dust	29 CFR 1910.1000
US	Particulates not otherwise regulated		PEL (CA)		10	Dust	Cal/OSHA PEL
US	Particulates not otherwise regulated		PEL (CA)		5	R	Cal/OSHA PEL

Notation

appx-D	See Appendix D - Substances with No Established RELs.
dust	As dust.
i	Inhalable fraction.
partml	Particles/ml.
r	Respirable fraction.
TWA	Time-weighted average (long-term exposure limit): measured or calculated in relation to a reference period of 8 hours time-weighted average (unless otherwise specified.

8.2 Exposure controls

Appropriate engineering controls

General ventilation. The use of approved dust collection equipment is recommended in high dust environments.

Individual protection measures (personal protective equipment)

Eye/face protection

Wear eye/face protection.

Hand protection

Wear chemical resistant protective gloves.

Other protection measures

Wear protective clothing (coveralls with hood) to reduce the possibility of stains to skin and clothing. Wash thoroughly after handling. An eyewash station and/or safety shower is recommended in the work area.

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

Protect against release into the environment using preventative containment measures. 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
Color	yellow
Odor	characteristic

Other safety parameters

pH (value)	not applicable
Melting point/freezing point	not determined
Initial boiling point and boiling range	>250 °C
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
Vapor pressure	<0.01 Pa at 25 °C
Density	1.17 $^{g}/_{cm^3}$
Vapor density	this information is not available
Bulk density	0.4 – 0.6 $^{g}/_{cm^3}$

Solubility(ies)

Water solubility	0.051 $^{mg}/_{l}$ at 28 °C

Partition coefficient

- n-octanol/water (log KOW)	4.643 (25 °C)
Soil organic carbon/water (log KOC)	4.271

Auto-ignition temperature	not determined
Decomposition temperature	>180 °C
Viscosity	not relevant solid matter
Explosive properties	dust explosion hazards
Oxidizing properties	none

9.2 Other information

Solid content	100 %

SECTION 10: Stability and reactivity

10.1 Reactivity

Concerning incompatibility: see below "Conditions to avoid" and "Incompatible materials".

10.2 Chemical stability

See below "Conditions to avoid".

10.3 Possibility of hazardous reactions

No known hazardous reactions.

10.4 Conditions to avoid

Avoid conditions that create dust.

10.5 Incompatible materials

Oxidizers.

10.6 Hazardous decomposition products

Reasonably anticipated hazardous decomposition products produced as a result of use, storage, spill and heating are not known. Hazardous combustion products: see section 5.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

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

Acute toxicity

Shall not be classified as acutely toxic.

Acute toxicity				
Exposure route	**Endpoint**	**Value**	**Species**	**Source**
Oral: No adverse effect observed LD50 2,600-6,658 mg/kg bw (rat); Source: ECHA -European Chemicals Agency				
Dermal: No adverse effect observed LD50 5,010 - 8,157 mg/kg bw (rabbit); Source: ECHA -European Chemicals Agency				

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 sensitization

Shall not be classified as a respiratory or skin sensitizer.

Germ cell mutagenicity

Shall not be classified as germ cell mutagenic.

Carcinogenicity

Shall not be classified as carcinogenic.

Reproductive toxicity

Shall not be classified as a reproductive toxicant.

Specific target organ toxicity - single exposure

Shall not be classified as a specific target organ toxicant (single exposure).

Specific target organ toxicity - repeated exposure

Shall not be classified as a specific target organ toxicant (repeated exposure).

Aspiration hazard

Shall not be classified as presenting an aspiration hazard.

SECTION 12: Ecological information

12.1 Toxicity

Very toxic to aquatic life with long lasting effects.

Aquatic toxicity (acute)				
Endpoint	**Value**	**Species**	**Source**	**Exposure time**
EC50	0.17 $^{mg}/_{l}$	Aquatic invertebrates	European Chemicals Agency, http://echa.europa.eu/	48 h
ErC50	381.3 $^{mg}/_{l}$	Algae	European Chemicals Agency, http://echa.europa.eu/	72 h
LC50	172.2 $^{mg}/_{l}$	Freshwater fish	European Chemicals Agency, http://echa.europa.eu/	96 h

12.2 Persistence and degradability

Data are not available.

12.3 Bioaccumulative potential

The substance fulfills the very bioaccumulative criterion.

n-octanol/water (log KOW)	4.643 (25 °C)
BCF	662.7

12.4 Mobility in soil

The Organic Carbon normalised adsorption coefficient	4.271

12.5 Results of PBT and vPvB assessment

Data are not available.

12.6 Other adverse effects

Endocrine disrupting potential

Not listed.

SECTION 13: Disposal considerations

13.1 Waste Treatment Methods / Disposal Instructions

Avoid release to the environment. Do not contaminate ponds, waterways or ditches with product or container. Dispose of contents/container in accordance with applicable local, regional, national, and international regulations.

Sewage disposal-relevant information

Do not allow this material to enter floor drains, sewer drains or storm drains.

Waste treatment of containers/packages

Containers containing product or product residue should be disposed of in the same manner as the product. Completely emptied and thoroughly cleaned containers can be recycled.

SECTION 14: Transport information

Information for each of the UN Model Regulations

14.8.3 Transport of dangerous goods by road or rail (49 CFR US DOT)

Not subject to transport regulations.

14.8.6 International Maritime Dangerous Goods Code (IMDG)

UN number	3077
Proper shipping name	UN 3077, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S., (C.I. Solvent Yellow 43)
Class	9
Marine pollutant	yes hazardous to the aquatic environment
Packing group	III
Danger label(s)	9 fish and tree

Special provisions (SP)	274, 335, 966, 967, 969
Excepted quantities (EQ)	E1
Limited quantities (LQ)	5 kg
EmS	F-A, S-F
Stowage category	A

14.8.7 International Civil Aviation Organization (ICAO-IATA/DGR)

UN number	3077
Proper shipping name	UN 3077, Environmentally hazardous substance, solid, n.o.s., (C.I. Solvent Yellow 43)
Class	9
Environmental hazards	yes hazardous to the aquatic environment
Packing group	III
Danger label(s)	9 fish and tree

Special provisions (SP)	A97, A158, A179, A197
Excepted quantities (EQ)	E1
Limited quantities (LQ)	30 kg

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations specific for the product in question

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

Specific Toxic Chemical Listings (EPCRA Section 313)

not 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

Right to Know Hazardous Substance List

Hazardous Substance List (NJ-RTK)

not listed

California Environmental Protection Agency (Cal/EPA): Proposition 65 - Safe Drinking Water and Toxic Enforcement Act of 1987

not listed

Drug precursorsChemicals designated within the Controlled Substances Act, 21 U.S.C. § 802, paragraphs 34 (list I) and 35 (list II)

not listed

VOC content

Regulated Volatile Organic Compounds (VOC-EPA): 0 %.
Regulated Volatile Organic Compounds (VOC-Cal ARB): 0 %.

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 (United States).

Category	Degree of hazard	Description
Flammability	2	Material that must be moderately heated or exposed to relatively high ambient temperatures before ignition can occur
Health	0	Material that, under emergency conditions, would offer no hazard beyond that of ordinary combustible material
Instability	0	Material that is normally stable, even under fire conditions
Special hazard		

National inventories

Country	Inventory	Status
US	TSCA	Substance is listed
CA	DSL	Substance is listed
AU	AICS	Substance is listed
CN	IECSC	Substance is listed
EU	ECSI	Substance is listed
EU	REACH Reg.	Substance is listed
JP	CSCL-ENCS	Substance is listed

Country	Inventory	Status
KR	KECI	Substance is listed
NZ	NZIoC	Substance is listed
PH	PICCS	Substance is listed
TW	TCSI	Substance is listed

Legend

AICS Australian Inventory of Chemical Substances.
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.
KECI Korea Existing Chemicals Inventory.
NZIoC New Zealand Inventory of Chemicals.
PICCS Philippine Inventory of Chemicals and Chemical Substances.
REACH Reg. REACH registered substances.
TCSI Taiwan Chemical Substance Inventory.
TSCA Toxic Substance Control Act.

15.2 Chemical Safety Assessment

No Chemical Safety Assessment has been carried out for this substance.

SECTION 16: Other information, including date of preparation or last revision

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)
49 CFR US DOT	49 CFR U.S. Department of Transportation
BCF	Bioconcentration factor
Cal/OSHA PEL	California Division of Occupational Safety and Health (Cal/OSHA): Permissible Exposure Limits (PELs)
Cal ARB	California Air Resources Board
CAS	Chemical Abstracts Service (service that maintains the most comprehensive list of chemical substances)
DGR	Dangerous Goods Regulations (see IATA/DGR)
EC50	Effective Concentration 50 %. The EC50 corresponds to the concentration of a tested substance causing 50 % changes in response (e.g. on growth) during a specified time interval
EINECS	European Inventory of Existing Commercial Chemical Substances
ELINCS	European List of Notified Chemical Substances
EmS	Emergency Schedule
EPA	Environmental Protection Agency. An agency of the federal government of the United States charged with protecting human health and the environment
ErC50	≡ EC50: in this method, that concentration of test substance which results in a 50 % reduction in either growth (EbC50) or growth rate (ErC50) relative to the control
GHS	"Globally Harmonized System of Classification and Labelling of Chemicals" developed by the United Nations
IATA	International Air Transport Association
IATA/DGR	Dangerous Goods Regulations (DGR) for the air transport (IATA)
ICAO	International Civil Aviation Organization
IMDG	International Maritime Dangerous Goods Code

Abbr.	Descriptions of used abbreviations
LC50	Lethal Concentration 50%: the LC50 corresponds to the concentration of a tested substance causing 50 % lethality during a specified time interval
NIOSH REL	National Institute for Occupational Safety and Health (NIOSH): Recommended Exposure Limits (RELs)
NLP	No-Longer Polymer
OSHA	Occupational Safety and Health Administration (United States)
PBT	Persistent, Bioaccumulative and Toxic
PEL	Permissible exposure limit
Ppm	Parts per million
TWA	Time-weighted average
VOC	Volatile Organic Compounds
VPvB	Very Persistent and very Bioaccumulative

Key literature references and sources for data

OSHA Hazard Communication Standard (HCS), 29 CFR 1910.1200.

Transport of dangerous goods by road or rail (49 CFR US DOT). International Maritime Dangerous Goods Code (IMDG). Dangerous Goods Regulations (DGR) for the air transport (IATA).

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

Code	Text
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.
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