

Fluorosol Red 7348

Version number GHS 2.0
Replaces version of 2019.07.01 GHS 1

Revision date 2021.12.18
Date format: yyyy-mm-dd

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

- 1.1 Product Identifier(s).**
Identification of the substance
Trade name C.I. Solvent Red 197
 Fluorosol Red 7348
 Former trade name(s): Fluorescent Red 7348
Registry number(s) CAS number 52372-39-1
 EC number 257-885-3
Alternative name(s) C.I. Disperse Red 277
 3-(diethylamino)-7-imino-7H-[1]benzopyrano[3',2':3,4]pyrido[1,2-a]benzimidazole-6-carbonitrile
 Color Index Constitution Number: 505720
Item code(s) D7348P
- 1.2 Relevant identified uses of the substance or mixture and uses advised against**
 Relevant identified uses Dye
 Industrial use
 Professional use
 Uses advised against Do not use for products which come into contact with foodstuffs. 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: 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 class and category	Hazard statement
B.cD	Combustible dust.	Comb. Dust	CD	OSHA003
Supplemental hazard information				
Code	Supplemental hazard information			
HNOC010	Harmful to aquatic life with long lasting effects (GHS category 3: aquatic toxicity - acute and/or chronic)			

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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 Not required

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

Harmful to aquatic life with long lasting effects (GHS category 3: 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 Red 197

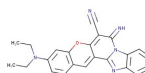
Identifiers

CAS No 52372-39-1

Molecular formula C23H19N5O

Molar mass 381.4 g/mol

Structural formula



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 laundry before reuse. In all cases of doubt, or when symptoms persist, seek medical advice.

Following inhalation

If inhalation causes irritation, move to fresh air. If symptoms develop or person does not feel well, get medical advice/attention.

Following skin contact

Wash with plenty of soap and water.

Following eye contact

Flush eyes with clean water for fifteen (15) minutes. Remove contact lenses if safe to do so. Flush longer if there is any indication of residual chemical in the eye. Ensure adequate flushing of the eyes by holding the eyelids open with fingers and rolling eyes in a circular motion. Get medical attention.

Following ingestion

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

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: Firefighting measures**5.1 Extinguishing media****Suitable extinguishing media**

Water fog. Foam. ABC-powder. Carbon dioxide (CO₂).

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 (NO_x). 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. Co-ordinate 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

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**

Country	Name of agent	Identifier	TWA [ppm]	TWA [mg/m ³]	Notation	Source
US	Particulates not otherwise classified (PNOC)	PEL	1,766	15	Partml, i, dust	29 CFR 1910.1000
US	Particulates not otherwise classified (PNOC)	PEL	529.5	5	Partml, r, dust	29 CFR 1910.1000

Notation

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**Colour**

Red

Odour

Odourless

Other safety parameters**pH (value)**6 – 7 (in aqueous solution: 10^{g/l}, 20 °C)**Melting point/freezing point**

263.4 °C

Initial boiling point and boiling range

613.7 °C

Flash point

>200 °C at 980.7 hPa

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

<0 Pa at 20 °C

Density1.33^{g/cm³} at 20 °C**Vapour density**

This information is not available

Bulk density0.3 – 0.6^{g/cm³}**Solubility(ies)**

Soluble in most hydrocarbons and non-polar solvents

Water solubility11^{µg/l} at 20 °C**Partition coefficient****- n-octanol/water (log KOW)**

5.5 (25 °C)

Auto-ignition temperature

190 °C

Decomposition temperature

>280 °C

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**

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 handling product in a manner that can produce dust clouds.

10.5 Incompatible materials

Strong oxidisers.

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	LD50	>10,000 mg/kg	Rat	European Chemicals Agency, http://echa.europa.eu/

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.

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**

Harmful to aquatic life with long lasting effects.

Aquatic toxicity (acute)				
Endpoint	Value	Species	Source	Exposure time
LC50	35.2 mg/l	Invertebrate freshwater organisms	Brief Profile of Substance, European Chemicals Agency, http://echa.europa.eu/	48 h

12.2 Persistence and degradability

Data are not available.

12.3 Bioaccumulative potential

The substance fulfils the very bioaccumulative criterion.

n-octanol/water (log KOW)	5.5
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12.4 Mobility in soil

Data are not available.

12.5 Results of PBT and vPvB assessment

Data are not available.

12.6 Endocrine disrupting properties

Not listed.

12.7 Other adverse effects

Data are not available.

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/packagings

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**14.1 UN number**

Not subject to transport regulations

UN proper shipping name

Not assigned

14.3 Transport hazard class(es)

Not assigned

14.4 Packing group

Not assigned

14.5 Environmental hazards

Non-environmentally hazardous acc. to the dangerous goods regulations

14.6 Special precautions for user

There is no additional information.

14.8 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)

Not subject to IMDG.

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

Not subject to ICAO-IATA.

SECTION 15: Regulatory information**15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture****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.

Cleaning Product Right to Know Act Substance List (CA-RTK)

Not listed.

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Toxic or Hazardous Substance List (MA-TURA)

Not listed.

Hazardous Substances List (MN-ERTK)

Name of substance	CAS No	References	Remarks
C.I. Solvent Red 197		A	Dust

Legend

- A American Conference of Governmental Industrial Hygienists (ACGIH), "Threshold Limit Values for Chemical Substances and Physical Agents and Biological Exposure Indices for 1992-93", available from ACGIH.
 dust If the substance poses an airborne particulate exposure hazard, the substance is followed by the word "dust".

Hazardous Substance List (NJ-RTK)

Not listed.

Hazardous Substance List (Chapter 323) (PA-RTK)

Not listed.

Hazardous Substance List (RI-RTK)

Not listed.

California Environmental Protection Agency (Cal/EPA): Proposition 65 - Safe Drinking Water and Toxic Enforcement Act of 1986

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
AU	AICS	Substance is listed
CA	DSL	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
KR	KECI	Substance is listed
NZ	NZIoC	Substance is listed
PH	PICCS	Substance is listed
TW	TCSI	Substance is listed
US	TSCA	Substance is listed

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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 (PICCS).
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

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
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)
EINECS	European Inventory of Existing Commercial Chemical Substances
ELINCS	European List of Notified Chemical Substances
EPA	Environmental Protection Agency. An agency of the federal government of the United States charged with protecting human health and the environment
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
LC50	Lethal Concentration 50%: the LC50 corresponds to the concentration of a tested substance causing 50 % lethality during a specified time interval
LD50	Lethal Dose 50 %: the LD50 corresponds to the dose of a tested substance causing 50 % lethality during a specified time interval
NLP	No-Longer Polymer
OSHA	Occupational Safety and Health Administration (United States)
PBT	Persistent, Bioaccumulative and Toxic
PEL	Workplace exposure limit
Ppm	Parts per million
TWA	Time-weighted average
VOC	Volatile Organic Compounds
VPvB	Very Persistent and very Bioaccumulative

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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 section 2 and 3)

Code	Text
OSHA003	May form combustible dust concentrations in air.

Disclaimer

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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.