1. Identification

Product identifier used on the label

Irgazin® Red K 3845

Recommended use of the chemical and restriction on use

Recommended use*: colouring component; pigment

* The “Recommended use” identified for this product is provided solely to comply with a Federal requirement and is not part of the seller's published specification. The terms of this Safety Data Sheet (SDS) do not create or infer any warranty, express or implied, including by incorporation into or reference in the seller's sales agreement.

Details of the supplier of the safety data sheet

Company:
BASF Colors & Effects USA LLC
100 Park Avenue
Florham Park, NJ 07932, USA

Telephone: +1 973 245-6000

Emergency telephone number

CHEMTREC: 1-800-424-9300
BASF HOTLINE: 1-800-832-HELP (4357)

Other means of identification

Chemical family: pigment

2. Hazards Identification


Classification of the product

Combustible Dust Combustible Dust (1) Combustible Dust

Label elements

Signal Word:
Warning

Hazard Statement:
May form combustible dust concentration in air.

Hazards not otherwise classified

The product is under certain conditions capable of dust explosion.

3. Composition / Information on Ingredients


This product does not contain any components classified as hazardous under the referenced regulation.

4. First-Aid Measures

Description of first aid measures

General advice:
Remove contaminated clothing.

If inhaled:
If difficulties occur after dust has been inhaled, remove to fresh air and seek medical attention.

If on skin:
Wash thoroughly with soap and water. If irritation develops, seek medical attention.

If in eyes:
Wash affected eyes for at least 15 minutes under running water with eyelids held open. If irritation develops, seek medical attention.

If swallowed:
Rinse mouth and then drink plenty of water. Do not induce vomiting. Seek medical attention if necessary.

Most important symptoms and effects, both acute and delayed

Symptoms: No significant reaction of the human body to the product known.

Indication of any immediate medical attention and special treatment needed

Note to physician
Treatment: Treat according to symptoms (decontamination, vital functions), no known specific antidote.

5. Fire-Fighting Measures

Extinguishing media

Suitable extinguishing media:
dry powder, foam
Unsuitable extinguishing media for safety reasons:
carbon dioxide

Additional information:
Avoid whirling up the material/product because of the danger of dust explosion.

**Special hazards arising from the substance or mixture**
Hazards during fire-fighting:
harmful vapours
Evolution of fumes/fog. The substances/groups of substances mentioned can be released in case of fire.

**Advice for fire-fighters**
Protective equipment for fire-fighting:
Firefighters should be equipped with self-contained breathing apparatus and turn-out gear.

**Further information:**
Dusty conditions may ignite explosively in the presence of an ignition source causing flash fire.

**Impact Sensitivity:**
Assessment: no

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**6. Accidental release measures**

**Personal precautions, protective equipment and emergency procedures**
Avoid dust formation. Use personal protective clothing.

**Environmental precautions**
Contain contaminated water/firefighting water. Do not discharge into drains/surface waters/groundwater.

**Methods and material for containment and cleaning up**
For small amounts: Pick up with suitable appliance and dispose of.
For large amounts: Contain with dust binding material and dispose of.
Avoid raising dust.

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**7. Handling and Storage**

**Precautions for safe handling**
Breathing must be protected when large quantities are decanted without local exhaust ventilation.
Closed containers should only be opened in well-ventilated areas.
Protection against fire and explosion:
Avoid dust formation. Take precautionary measures against static discharges.
Dust can form an explosive mixture with air.

**Conditions for safe storage, including any incompatibilities**
Further information on storage conditions: Keep container tightly closed and dry; store in a cool place.
8. Exposure Controls/Personal Protection

No occupational exposure limits known.

**Personal protective equipment**

**Respiratory protection:**
Wear a NIOSH-certified (or equivalent) particulate respirator.


**Hand protection:**
Chemical resistant protective gloves

**Eye protection:**
Safety glasses with side-shields. Wear face shield if splashing hazard exists.

**General safety and hygiene measures:**
Wear protective clothing as necessary to minimize contact. Handle in accordance with good industrial hygiene and safety practice.

9. Physical and Chemical Properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Form</td>
<td>powder</td>
</tr>
<tr>
<td>Odour</td>
<td>odourless</td>
</tr>
<tr>
<td>Odour threshold</td>
<td>not determined</td>
</tr>
<tr>
<td>Colour</td>
<td>red</td>
</tr>
<tr>
<td>pH value</td>
<td>5.5 - 8.5 (as suspension)</td>
</tr>
<tr>
<td>Melting point</td>
<td>&gt; 300 °C (as suspension)</td>
</tr>
<tr>
<td>Boiling point</td>
<td>1,013.25 hPa, solid with a melting temperature over 300 °C</td>
</tr>
<tr>
<td>Flash point</td>
<td>not relevant</td>
</tr>
<tr>
<td>Flammability</td>
<td>not highly flammable</td>
</tr>
<tr>
<td>Lower explosion limit</td>
<td>not determined</td>
</tr>
<tr>
<td>Upper explosion limit</td>
<td>not determined</td>
</tr>
<tr>
<td>Autoignition</td>
<td>&gt; 600 °C</td>
</tr>
<tr>
<td>Vapour pressure</td>
<td>not applicable</td>
</tr>
<tr>
<td>Density</td>
<td>1.58 g/cm³ (20 °C)</td>
</tr>
<tr>
<td>Relative density</td>
<td>1.58 (20 °C)</td>
</tr>
<tr>
<td>Bulk density</td>
<td>1,580 kg/m³</td>
</tr>
<tr>
<td>Vapour density</td>
<td>The product is a non-volatile solid.</td>
</tr>
<tr>
<td>Partitioning coefficient n-octanol/water (log Pow)</td>
<td></td>
</tr>
<tr>
<td>Self-ignition temperature</td>
<td>Based on its structural properties the product is not classified as self-igniting.</td>
</tr>
<tr>
<td>Viscosity, dynamic</td>
<td>not relevant</td>
</tr>
</tbody>
</table>
10. Stability and Reactivity

**Reactivity**
No hazardous reactions if stored and handled as prescribed/indicated.

Corrosion to metals:
No corrosive effect on metal.

Oxidizing properties:
not fire-propagating (Directive 84/449/EEC, A.17)

Dust explosivity characteristics:
Kst:
Formation of flammable gases: Remarks: Forms no flammable gases in the presence of water.

**Chemical stability**
The product is stable if stored and handled as prescribed/indicated.

**Possibility of hazardous reactions**
Dust explosion hazard.

**Conditions to avoid**
Avoid electro-static discharge.
Avoid sources of ignition.

**Incompatible materials**
strong oxidizing agents, strong bases, strong acids

**Hazardous decomposition products**
Decomposition products:
Hazardous decomposition products: Hydrogen chloride, carbon oxides, nitrogen oxides, toxic gases/vapours

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11. Toxicological information

**Primary routes of exposure**
Routes of entry for solids and liquids are ingestion and inhalation, but may include eye or skin contact. Routes of entry for gases include inhalation and eye contact. Skin contact may be a route of entry for liquefied gases.
Primary routes of entry
Inhalation.
Ingestion.
Eyes
Skin

Acute Toxicity/Effects

Acute toxicity
Assessment of acute toxicity: Virtually nontoxic after a single ingestion. Virtually nontoxic after a single skin contact. Virtually nontoxic by inhalation.

Oral
Type of value: LD50
Species: rat (male/female)
Value: > 5,000 mg/kg  (Directive 84/449/EEC, B.1)

Inhalation
Type of value: LC0
Species: rat (male/female)
Value: > 2.25 mg/l  (OECD Guideline 403)
Exposure time: 4 h

Dermal
Type of value: LD50
Species: rat (male/female)
Value: > 2,000 mg/kg  (OECD Guideline 402)

Assessment other acute effects
Assessment of STOT single:
Based on the available information there is no specific target organ toxicity to be expected after a single exposure.

Irritation / corrosion
Assessment of irritating effects: Not irritating to the skin. Not irritating to the eyes.

Skin
Species: rabbit
Result: non-irritant
Method: Directive 84/449/EEC, B.4

Eye
Species: rabbit
Result: non-irritant
Method: Directive 84/449/EEC, B.5

Sensitization
Assessment of sensitization: Skin sensitizing effects were not observed in animal studies.

Guinea pig maximization test
Species: guinea pig
Result: Non-sensitizing.
Method: OECD Guideline 406

Aspiration Hazard
not applicable
Chronic Toxicity/Effects

Repeated dose toxicity
Assessment of repeated dose toxicity: Repeated oral uptake of the substance did not cause substance-related effects.

Genetic toxicity
Assessment of mutagenicity: The substance was not mutagenic in bacteria. The substance was not mutagenic in studies with mammals. No mutagenic effects reported.

Carcinogenicity
Assessment of carcinogenicity: No data available concerning carcinogenic effects. None of the components in this product at concentrations greater than 0.1% are listed by IARC; NTP, OSHA or ACGIH as a carcinogen.

Reproductive toxicity
Assessment of reproduction toxicity: No data available. No reproductive toxic effects reported.

Teratogenicity
Assessment of teratogenicity: No indications of a developmental toxic / teratogenic effect were seen in animal studies. Literature data. No teratogenic effects reported.

Symptoms of Exposure
No significant reaction of the human body to the product known.

12. Ecological Information

Toxicity

Aquatic toxicity
Assessment of aquatic toxicity: There is a high probability that the product is not acutely harmful to aquatic organisms. The inhibition of the degradation activity of activated sludge is not anticipated when introduced to biological treatment plants in appropriate low concentrations.

Toxicity to fish
LC50 (96 h) > 100 mg/l, Brachydanio rerio (OECD 203; ISO 7346; 84/449/EEC, C.1, static)
Nominal concentration. No toxic effects occur within the range of solubility. Limit concentration test only (LIMIT test).

Aquatic invertebrates
EC50 (24 h) > 100 mg/l, Daphnia magna (OECD Guideline 202, part 1, static)
Nominal concentration. No toxic effects occur within the range of solubility.

Aquatic plants
EC50 (72 h) > 100 mg/l (growth rate), Desmodesmus subspicatus (OECD Guideline 201, static)

Chronic toxicity to fish
No observed effect concentration (21 d), Oncorhynchus mykiss (OECD Guideline 204, Flow through.)
Nominal concentration. No toxic effects occur within the range of solubility. No effects at the highest test concentration. The product has low solubility in the test medium. A saturated solution has been tested.

Chronic toxicity to aquatic invertebrates
No observed effect concentration (21 d), Daphnia magna (OECD Guideline 202, part 2, semistatic) Nominal concentration. No toxic effects occur within the range of solubility. No effects at the highest test concentration. The product has low solubility in the test medium. A saturated solution has been tested.

Soil living organisms
Toxicity to soil dwelling organisms:
LC50 (14 d) > 1,000 mg/kg, Eisenia foetida (artificial soil)

Toxicity to terrestrial plants
EC0 (15 d) > 1,000 mg/kg, Lolium perenne (OECD Guideline 208)

Microorganisms/Effect on activated sludge
Toxicity to microorganisms
static activated sludge, domestic/EC20 (3 h): > 100 mg/l
Nominal concentration. No toxic effects occur within the range of solubility.

Persistence and degradability
Assessment biodegradation and elimination (H2O)
Not readily biodegradable (by OECD criteria). Poorly biodegradable. Poorly eliminated from water.

Elimination information
4 % CO2 formation relative to the theoretical value (28 d) (OECD 301B; ISO 9439; 92/69/EEC, C.4-C) (aerobic, activated sludge, domestic, non-adapted)

Information on Stability in Water (Hydrolysis)
Study technically not feasible.

Bioaccumulative potential
Bioaccumulation potential
No significant accumulation in organisms is expected as a result of the distribution coefficient of n-octanol/water (log Pow).

Mobility in soil
Assessment transport between environmental compartments
The substance will not evaporate into the atmosphere from the water surface. Adsorption to solid soil phase is expected.

Additional information
Adsorbable organically-bound halogen (AOX):
The product contains according to the formulation, organically bound halogen. It can increase the AOX-value in the water purification plants overflow or if it reaches waters.

Other ecotoxicological advice:
13. Disposal considerations

Waste disposal of substance:
Do not discharge into drains/surface waters/groundwater. Dispose of in accordance with national, state and local regulations.

Container disposal:
Dispose of in accordance with national, state and local regulations. Recommend crushing, puncturing or other means to prevent unauthorized use of used containers.

RCRA:
Not a hazardous waste under RCRA (40 CFR 261).

14. Transport Information

Land transport
USDOT
Not classified as a dangerous good under transport regulations

Sea transport
IMDG
Not classified as a dangerous good under transport regulations

Air transport
IATA/ICAO
Not classified as a dangerous good under transport regulations

15. Regulatory Information

VOC content:
negligible

Federal Regulations

Registration status:
Chemical TSCA, US released / listed

EPCRA 311/312 (Hazard categories): Fire (Combustible Dust);

NFPA Hazard codes:
Health : 1 Fire: 2 Reactivity: 0 Special:

HMIS III rating
Health: 1 Flammability: 1 Physical hazard: 1
16. Other Information

SDS Prepared by:
BASF NA Product Regulations
SDS Prepared on: 2016/05/09

We support worldwide Responsible Care® initiatives. We value the health and safety of our employees, customers, suppliers and neighbors, and the protection of the environment. Our commitment to Responsible Care is integral to conducting our business and operating our facilities in a safe and environmentally responsible fashion, supporting our customers and suppliers in ensuring the safe and environmentally sound handling of our products, and minimizing the impact of our operations on society and the environment during production, storage, transport, use and disposal of our products.

Irgazin® Red K 3845 END OF DATA SHEET