

Safety Data Sheet

Irgacure® PAG103

Revision date : 2010/09/16

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Version: 1.2

(30475100/SDU_GEN_US/EN)

1. Product and Company Identification

Company
BASF CORPORATION
100 Campus Drive
Florham Park, NJ 07932, USA

24 Hour Emergency Response Information
CHEMTREC: 1-800-424-9300
BASF HOTLINE: 1-800-832-HELP

Registrant:

Molecular formula: C16 H16 N2 O3 S2

2. Hazards Identification

Emergency overview

Signal word: CAUTION !
Colour: yellow to brown
Appearance: powder
State of matter: solid
Odour: odourless
Health: This product is a strong skin sensitizer., May cause slight eye and skin irritation.
Physical/Chemical hazards: FLAMMABLE SOLID., Refer to MSDS Section 7 for Dust Explosion information.

Potential health effects

Primary routes of entry:

Ingestion, Skin, Inhalation, Eyes

Potential environmental effects

The aquatic toxicity of this product has not been fully assessed. Releases to the environment are to be avoided.

3. Composition/Information on Ingredients

| <u>Chemical name</u> | <u>CAS Number</u> | <u>Content (Weight)</u> | <u>Hazardous</u> |
|--------------------------------|-------------------|-------------------------|------------------|
| Benzeneacetonitrile derivative | Trade Secret | 60.0 - 100.0 % | Y |

This material is classified as hazardous under OSHA regulations.

4. First-aid Measures

Inhalation:

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Remove to fresh air, if not breathing give artificial respiration. If breathing is difficult, give oxygen and get immediate medical attention.

Skin:

If clothing is contaminated, remove and launder before reuse.
After contact with skin, wash immediately with plenty of water and soap.
Get medical attention if irritation occurs.

Eyes:

Immediately flush the eye(s) with lukewarm, gently flowing water for 15 minutes or until the chemical is removed. Get immediate medical attention if irritation persists.

Ingestion:

Do not induce vomiting. If vomiting occurs naturally, have casualty lean forward to reduce the risk of aspiration. Seek medical attention immediately.

Notes to physician:

Specific identity of this product or component(s) of this product is withheld as a trade secret. A more complete description will be provided to a doctor or nurse in the event of a medical emergency.

5. Fire-fighting Measures

Suitable extinguishing media:

carbon dioxide, dry powder, foam, water fog

Hazardous combustion products:

Burning may produce toxic combustion products.

Hazards during fire-fighting:

Standard procedure for chemical fires.

The product can form an explosive dust/air mixture. For further information, see Section 7 Explosion Hazards.

Protective equipment for fire-fighting:

Wear self-contained breathing apparatus and chemical-protective clothing.

6. Accidental Release Measures

Cleanup:

Sweep up and shovel into suitable containers for disposal.
Avoid raising dust.
Wear suitable protective equipment.
Should not be released into the environment.

7. Handling and Storage

Handling

General advice:

As with all industrial chemicals, use good industrial practices when handling. Avoid eye, skin, and clothing contact. Do not inhale. Do not taste or swallow. Use only with adequate ventilation.

Protection against fire and explosion:

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Combustible powder. - Avoid creating dusty conditions. - Grounding is required when emptying into a conductive container. - When flammable solvents are present, the container must be inerted or the system otherwise designed to prevent or contain an explosion. Seek expert advice. In addition, for products packaged in fused-lined (coated) fiber drums, fiber drums with conductive liners, steel drums, steel pails, and Type " C " FIBC (bulk bags), or other conductive the following instructions also apply: - Always ground this package before emptying. The user is responsible for designing the system to handle solid and ensuring proper training of employees in the system's use.

Storage

General advice:

Keep container tightly closed in a dry, cool and well-ventilated place.

> for industrial use only <

8. Exposure Controls and Personal Protection

Engineering Controls:

Work in well ventilated areas. Do not breathe dust.

Personal protective equipment

Respiratory protection:

Wear a NIOSH-certified respirator as necessary.

Eye protection:

Wear safety goggles (chemical goggles) if there is potential for airborne dust exposures.

Body protection:

Wear chemical resistant gloves and protective clothing.

General safety and hygiene measures:

There are no OSHA or ACGIH exposure guidelines available for component(s) in this product.

9. Physical and Chemical Properties

| | | |
|--|-------------------|-----------------------------|
| Colour: | yellow to brown | |
| Form: | powder | |
| State of matter: | solid | |
| Odour: | odourless | |
| pH value: | | Not tested |
| Evaporation rate: | | Not applicable |
| Flammability: | Highly flammable. | (Directive 92/69/EEC, A.10) |
| Flash point: | | Not tested |
| Self-ignition temperature: | | Not tested |
| Melting point: | 93 - 95 °C | |
| Boiling point: | | Not tested |
| Vapour pressure: | | Not tested |
| Density: | | Not tested |
| Vapour density: | | Not applicable |
| Partitioning coefficient n-octanol/water (log Pow): | | Not tested |
| % Volatiles: | | not determined |
| Solubility in water: | | Not tested |

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10. Stability and Reactivity

Stability:

Stable.

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

Substances to avoid: Strong oxidizing agents, strong acids, strong bases.

Possibility of Hazardous Reactions: No hazardous reactions known.

Hazardous decomposition products: Hazardous decomposition products: No decomposition expected under normal storage conditions.

11. Toxicological Information

Acute oral toxicity:

LD50 / oral / rat: > 2,000 mg/kg

Acute inhalation toxicity:

not determined

Acute dermal toxicity:

dermal:
not determined

Skin irritation:

(Rabbits) Slight Irritant.

Eye irritation:

(Rabbits) Slight Irritant.

Skin Sensitization:

(Guinea pig) Maximization test: Strong skin sensitizer

Respiratory Sensitization:

not determined

Subacute toxicity:

not determined

Subchronic Toxicity:

not determined

Chronic toxicity:

not determined

Genetic toxicity:

Non-mutagenic.

Carcinogenicity:

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:

not determined

Developmental toxicity/teratogenicity:

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not determined

12. Ecological Information

Toxicity to fish:

Not tested

Toxicity to aquatic invertebrates:

Not tested

Toxicity to aquatic plants:

Not tested

Toxicity to microorganisms:

Not tested

Biodegradation:

Not tested

Other ecotoxicological advice:

No ecological data available

13. Disposal Considerations

Waste disposal of substance:

Dispose of in accordance with national, state and local regulations.

Resource Conservation and Recovery Act (RCRA): Not a hazardous waste under RCRA (40 CFR 261).

14. Transport Information

U.S. Department of Transportation

The listed Transportation Classification does not address regulatory variations due to changes in package size, mode of shipment or other regulatory descriptors.

Road transport:

| | |
|-----------------------|-----------------------------------|
| Proper shipping name: | FLAMMABLE SOLIDS, ORGANIC, N.O.S. |
| Technical name: | (BENZENE-ACETONITRILE DERIVATIVE) |
| Hazard class: | 4.1 |
| UN/ID-number: | UN 1325 |
| Packing Group: | III |
| Marine pollutant: | NO |

Air transport:

| | |
|-----------------------|-----------------------------------|
| Proper shipping name: | FLAMMABLE SOLIDS, ORGANIC, N.O.S. |
| Technical name: | (BENZENE-ACETONITRILE DERIVATIVE) |
| Hazard class: | 4.1 |
| UN/ID-number: | UN 1325 |

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Packing Group: III
Marine pollutant: NO

Inland-waterway transport:

Proper shipping name: FLAMMABLE SOLIDS, ORGANIC, N.O.S.
Technical name: (BENZENE-ACETONITRILE DERIVATIVE)
Hazard class: 4.1
UN/ID-number: UN 1325
Packing Group: III
Marine pollutant: NO

15. Regulatory Information

Canada: Domestic Substances List (DSL): Not all components are listed on the DSL
US: Toxic Substances Control Act (TSCA): All component(s) comprising this product are either exempt or listed on the TSCA inventory

United States - Regulations

SARA Section 311/312 Hazard Communication Standard:

| | | | |
|-----------------|---|-----------------------------|---|
| Acute Health: | Y | Fire: | Y |
| Chronic Health: | N | Reactivity: | N |
| | | Sudden release of pressure: | N |

SARA Reportable Quantities:

No components listed.

SARA Section 313 Toxic Chemical List:

No components listed.

OSHA hazard category:

This material is classified as hazardous under OSHA regulations.

Toxic Substances Control Act (TSCA) Significant New Use Rule (SNUR):

This product is not subject to a Significant New Use Rule (SNUR).

Toxic Substances Control Act (TSCA) Section 5(e) Consent Orders:

This product is not subject to a Section 5(e) Consent Order.

Toxic Substances Control Act (TSCA) Section 5(f):

This product is not subject to a Section 5(f)/6(a) rule.

Toxic Substances Control Act (TSCA) Section 12(b) Export Notification:

No components listed.

Clean Air Act - Hazardous Air Pollutants (HAP):

This product does not contain any Hazardous Air Pollutants (HAP), as defined by the U.S. Clean Air Act Section 112 (40 CFR 61).

Clean Air Act 111 - Volatile Organic Compounds (VOC):

This product does not contain any SOCM Intermediate or Final Volatile Organic Compounds (VOC), as defined by the U.S. Clean Air Act Section 111 (40 CFR 60.489).

Clean Air Act 602 - Ozone Depleting Substances (ODS):

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This product neither contains, nor was manufactured with, a Class I or Class II ozone depleting substance (ODS), as defined by the U.S. Clean Air Act Section 602 (40 CFR 82, Subpt. A, App. A+B).

Clean Water Act - Priority Pollutants (PP):

This product does not contain any priority pollutants listed under the U.S. Clean Water Act Section 307(2)(1) Priority Pollutant List (40 CFR 401.15).

Pennsylvania Right to Know:

This product does not contain any components that are subject to the Pennsylvania Right-To-Know disclosure requirement.

California Proposition 65 - Chemicals Known to the State to Cause Cancer:

No components listed.

California Proposition 65 - Chemicals Known to the State to Cause Reproductive Toxicity:

No components listed.

International Regulations

Chemical Weapons Convention:

This product does not contain any component(s) listed under the Chemical Weapons Convention Schedule of Chemicals.

16. Other Information

Irgacure® PAG103 is a registered trademark of BASF Corporation or BASF SE
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Due to the merger of CIBA and BASF Group all Material Safety Data Sheets have been reassessed on the basis of consolidated information. This may have resulted in changes of the Material Safety Data Sheets. In case you have questions concerning such changes please contact us at the address mentioned in Section I.

END OF DATA SHEET