

Safety Data Sheet

Uvinul® MS 40

Revision date : 2018/10/15

Version: 6.0

Page: 1/11

(30035116/SDS_COS_CA/EN)

1. Identification

Product identifier used on the label

Uvinul® MS 40

Recommended use of the chemical and restriction on use

Recommended use*: cosmetic ingredient

Recommended use*: cosmetic ingredient

* 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 Canada Inc.

100 Milverton Drive

Mississauga, ON L5R 4H1, CANADA

Telephone: +1 289 360-1300

Emergency telephone number

CANUTEC (reverse charges): (613) 996-6666

BASF HOTLINE: (800) 454-COPE (2673)

Other means of identification

Chemical family: No applicable information available.

Synonyms: Not available.

INCI Name: Benzophenone-4

2. Hazards Identification

According to Hazardous Products Regulations (HPR) (SOR/2015-17)

Classification of the product

| | | |
|-------------------|----------------------|--|
| Skin Corr./Irrit. | 2 | Skin corrosion/irritation |
| Eye Dam./Irrit. | 1 | Serious eye damage/eye irritation |
| Skin Sens. | 1B | Skin sensitization |
| Combustible Dust | Combustible Dust (1) | Combustible Dust |
| Aquatic Acute | 3 | Hazardous to the aquatic environment - acute |

Safety Data Sheet

Uvinul® MS 40

Revision date : 2018/10/15
Version: 6.0

Page: 2/11
(30035116/SDS_COS_CA/EN)

Label elements

Pictogram:



Signal Word:
Danger

Hazard Statement:

| | |
|------|---|
| H318 | May form combustible dust concentration in air. |
| H315 | Causes serious eye damage. |
| H317 | Causes skin irritation. |
| H402 | May cause an allergic skin reaction. |
| | Harmful to aquatic life. |

Precautionary Statements (Prevention):

| | |
|------|--|
| P280 | Wear protective gloves and eye/face protection. |
| P261 | Avoid breathing dust/fume/gas/mist/vapours/spray. |
| P273 | Avoid release to the environment. |
| P272 | Contaminated work clothing should not be allowed out of the workplace. |
| P264 | Wash with plenty of water and soap thoroughly after handling. |

Precautionary Statements (Response):

| | |
|--------------------|--|
| P305 + P351 + P338 | IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. |
| P310 | Immediately call a POISON CENTER or doctor/physician. |
| P303 + P352 | IF ON SKIN (or hair): Wash with plenty of soap and water. |
| P362 + P364 | Take off contaminated clothing and wash it before reuse. |

Precautionary Statements (Disposal):

| | |
|------|---|
| P501 | Dispose of contents/container to hazardous or special waste collection point. |
|------|---|

Hazards not otherwise classified

Fine dust can form an inflammable mixture together with air.

3. Composition / Information on Ingredients

According to Hazardous Products Regulations (HPR) (SOR/2015-17)

| <u>CAS Number</u> | <u>Weight %</u> | <u>Chemical name</u> |
|-------------------|---------------------|----------------------|
| 4065-45-6 | >= 75.0 - <= 100.0% | Benzophenone-4 |

4. First-Aid Measures

Description of first aid measures

General advice:

If adverse health effects develop seek medical attention.

Safety Data Sheet

Uvinul® MS 40

Revision date : 2018/10/15

Version: 6.0

Page: 3/11

(30035116/SDS_COS_CA/EN)

If inhaled:

Keep patient calm, remove to fresh air.

If on skin:

Wash thoroughly with soap and water. Remove contaminated clothing.

Do not rub affected parts of the body. Wash contaminated clothing before reuse. If irritation develops, seek medical attention.

If in eyes:

Rinse immediately with plenty of running water (for 10 minutes), seek medical attention from a specialist.

Do not rub the eyes. Remove contact lenses, if present.

If swallowed:

Rinse mouth and then drink 200-300 ml of water.

Most important symptoms and effects, both acute and delayed

Symptoms: The most important known symptoms and effects are described in the labelling (see section 2) and/or in section 11., (Further) symptoms and / or effects are not known so far

Hazards: No hazard is expected under intended use and appropriate handling.

Indication of any immediate medical attention and special treatment needed

Note to physician

Treatment: Treat symptomatically.

5. Fire-Fighting Measures

Extinguishing media

Suitable extinguishing media:
water spray, dry powder, foam

Unsuitable extinguishing media for safety reasons:
carbon dioxide

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:

Wear a self-contained breathing apparatus.

Further information:

Dispose of fire debris and contaminated extinguishing water in accordance with official regulations.

Safety Data Sheet

Uvinul® MS 40

Revision date : 2018/10/15
Version: 6.0

Page: 4/11
(30035116/SDS_COS_CA/EN)

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

6. Accidental release measures

Further accidental release measures:

Avoid dispersal of dust in the air (i.e., clearing dust surfaces with compressed air). Avoid the formation and build-up of dust - danger of dust explosion. Dust in sufficient concentration can result in an explosive mixture in air. Handle to minimize dusting and eliminate open flame and other sources of ignition.

Personal precautions, protective equipment and emergency procedures

Avoid dust formation. Avoid contact with skin and eyes. Information regarding personal protective measures see, section 8.

Environmental precautions

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.
Dispose of absorbed material in accordance with regulations.

Nonsparking tools should be used.

7. Handling and Storage

Precautions for safe handling

Avoid dust formation. Ensure thorough ventilation of stores and work areas. Avoid contact with skin and eyes. Wear suitable gloves and eye/face protection. Handle in accordance with good industrial hygiene and safety practice.

Protection against fire and explosion:

Avoid dust formation. Dust in sufficient concentration can result in an explosive mixture in air. Handle to minimize dusting and eliminate open flame and other sources of ignition. Routine housekeeping should be instituted to ensure that dusts do not accumulate on surfaces. Dry powders can build static electricity charges when subjected to the friction of transfer and mixing operations. Provide adequate precautions, such as electrical grounding and bonding, or inert atmospheres. Refer to NFPA 654, Standard for the Prevention of Fire and Dust Explosions from the Manufacturing, Processing, and Handling of Combustible Particulate Solids (2013 Edition) for safe handling.

Conditions for safe storage, including any incompatibilities

Suitable materials for containers: High density polyethylene (HDPE), Low density polyethylene (LDPE)

Further information on storage conditions: Protect contents from the effects of light. Containers should be stored tightly sealed in a dry place. Protect against heat.

8. Exposure Controls/Personal Protection

No occupational exposure limits known.

Safety Data Sheet

Uvinul® MS 40

Revision date : 2018/10/15

Version: 6.0

Page: 5/11

(30035116/SDS_COS_CA/EN)

Advice on system design:

If dust formation caused by handling cannot be avoided Staubex equipment for plants may be necessary. Ensure adequate ventilation.

It is recommended that all dust control equipment such as local exhaust ventilation and material transport systems involved in handling of this product contain explosion relief vents or an explosion suppression system or an oxygen deficient environment. Ensure that dust-handling systems (such as exhaust ducts, dust collectors, vessels, and processing equipment) are designed in a manner to prevent the escape of dust into the work area (i.e., there is no leakage from the equipment). Use only appropriately classified electrical equipment and powered industrial trucks.

Personal protective equipment

Respiratory protection:

Wear a NIOSH-certified (or equivalent) organic vapour/particulate respirator as needed.

Hand protection:

Chemical resistant protective gloves, Suitable materials, rubber, plastic

Eye protection:

Safety glasses with side-shields.

Body protection:

Body protection must be chosen depending on activity and possible exposure, e.g. head protection, apron, protective boots, chemical-protection suit.

General safety and hygiene measures:

Avoid contact with the skin, eyes and clothing. Wearing of closed work clothing is recommended. Handle in accordance with good industrial hygiene and safety practice. No eating, drinking, smoking or tobacco use at the place of work. Handle in accordance with good industrial hygiene and safety practice.

9. Physical and Chemical Properties

| | | |
|-----------------------------------|--|-------------------------|
| Form: | powder | |
| Odour: | odourless | |
| Odour threshold: | not applicable, odour not perceivable | |
| Colour: | off-white to yellow | |
| pH value: | < 2 (10 g/l, 20 °C) | |
| Melting point: | approx. 170 °C | (capillary tube method) |
| Boiling point: | > 240 °C (978.2 hPa) | (OECD Guideline 103) |
| Flash point: | not applicable | |
| Flammability: | not applicable, the product is a solid | |
| Flammability of Aerosol Products: | not applicable, the product does not form flammable aerosols | |
| Lower explosion limit: | For solids not relevant for classification and labelling. | |
| Upper explosion limit: | For solids not relevant for classification and labelling. | |
| Autoignition: | not determined | |
| Vapour pressure: | < 0.000001 Pa (25 °C) | (calculated) |
| Bulk density: | approx. 830 kg/m ³ | |

Safety Data Sheet

Uvinul® MS 40

Revision date : 2018/10/15
Version: 6.0

Page: 6/11
(30035116/SDS_COS_CA/EN)

| | | |
|---|--|----------------------|
| Vapour density: | The product is a non-volatile solid. | |
| Partitioning coefficient n-octanol/water (log Pow): | 0.313 (22 °C) | (OECD Guideline 107) |
| Self-ignition temperature: | not self-igniting | |
| Thermal decomposition: | No decomposition if stored and handled as prescribed/indicated. | |
| Viscosity, dynamic: | not applicable, the product is a solid | |
| Viscosity, kinematic: | not applicable, the product is a solid | |
| Solubility in water: | 250 g/l (30 °C) | |
| Miscibility with water: | soluble | |
| Molar mass: | 308.31 g/mol | |
| Evaporation rate: | The product is a non-volatile solid. | |
| Other Information: | If necessary, information on other physical and chemical parameters is indicated in this section. No further information available. | |

10. Stability and Reactivity

Reactivity

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

Corrosion to metals:

Corrosive effects to metal are not anticipated.

Oxidizing properties:

not fire-propagating

Minimum ignition energy:

17.6 mJ

Chemical stability

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

Possibility of hazardous reactions

Reacts with peroxides. Reacts with strong alkalies and oxidizing agents.

Conditions to avoid

See MSDS section 7 - Handling and storage.

Incompatible materials

strong oxidizing agents, bases, peroxides

Hazardous decomposition products

Decomposition products:

Hazardous decomposition products: No hazardous decomposition products if stored and handled as prescribed/indicated.

Thermal decomposition:

No decomposition if stored and handled as prescribed/indicated.

11. Toxicological information

Primary routes of exposure

Safety Data Sheet

Uvinul® MS 40

Revision date : 2018/10/15
Version: 6.0

Page: 7/11
(30035116/SDS_COS_CA/EN)

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.

Acute Toxicity/Effects

Acute toxicity

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

Oral

Type of value: LD50

Species: rat

Value: > 6,400 mg/kg

Literature data.

Inhalation

No applicable information available.

Dermal

Type of value: LD50

Species: rabbit

Value: > 5,000 mg/kg (other)

Literature data.

Assessment other acute effects

Assessment of STOT single:

Based on available Data, the classification criteria are not met.

Irritation / corrosion

Assessment of irritating effects: Skin contact causes irritation. May cause severe damage to the eyes.

An in vitro test indicated the potential to cause serious damage to the eyes.

Information on: Benzophenone-4

Assessment of irritating effects: Skin contact causes irritation. An in vitro test indicated the potential to cause serious damage to the eyes.

An in vitro test indicated the potential to cause serious damage to the eyes.

Skin

Species: In vitro assay

Result: Irritant.

Method: OECD Guidelines 431/439

Eye

Species: In vitro assay

Result: Risk of serious damage to eyes.

Method: OECD Guideline 437

Sensitization

Assessment of sensitization: Caused skin sensitization in animal studies.

Information on: Benzophenone-4

Assessment of sensitization:

Caused skin sensitization in animal studies.

Safety Data Sheet

Uvinul® MS 40

Revision date : 2018/10/15
Version: 6.0

Page: 8/11
(30035116/SDS_COS_CA/EN)

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

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

Aspiration Hazard
No aspiration hazard expected.

Chronic Toxicity/Effects

Repeated dose toxicity
Assessment of repeated dose toxicity: No adverse effects were observed after repeated oral exposure in animal studies.

Genetic toxicity
Assessment of mutagenicity: No mutagenic effect was found in various tests with bacteria and mammalian cell culture.

Carcinogenicity
Assessment of carcinogenicity: The chemical structure does not suggest a specific alert for such an effect.

Reproductive toxicity
Assessment of reproduction toxicity: The results of animal studies gave no indication of a fertility impairing effect. The results were determined in a Screening test (OECD 421/422).

Teratogenicity
Assessment of teratogenicity: No indications of a developmental toxic / teratogenic effect were seen in animal studies. The results were determined in a Screening test (OECD 421/422).

Symptoms of Exposure

The most important known symptoms and effects are described in the labelling (see section 2) and/or in section 11., (Further) symptoms and / or effects are not known so far

12. Ecological Information

Toxicity

Aquatic toxicity
Assessment of aquatic toxicity:
Acutely harmful for 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) > 220 - < 460 mg/l, *Leuciscus idus* (DIN 38412 Part 15, static)
The details of the toxic effect relate to the nominal concentration.

Aquatic invertebrates

Safety Data Sheet

Uvinul® MS 40

Revision date : 2018/10/15

Page: 9/11

Version: 6.0

(30035116/SDS_COS_CA/EN)

EC50 (48 h) 50 mg/l, Daphnia magna (OECD Guideline 202, part 1, other)

The details of the toxic effect relate to the nominal concentration.

Aquatic plants

EC50 (72 h) > 200 mg/l (growth rate), Chlorella vulgaris (OECD Guideline 201, static)

The details of the toxic effect relate to the nominal concentration.

Chronic toxicity to aquatic invertebrates

No observed effect concentration (21 d) > 5 mg/l, Daphnia magna (OECD Guideline 211, semistatic)

The details of the toxic effect relate to the nominal concentration.

Assessment of terrestrial toxicity

No effects at the highest test concentration.

Soil living organisms

Toxicity to soil dwelling organisms:

LC50 (14 d) 13329,073 mg/L, Eisenia sp. (other, other)

The details of the toxic effect relate to the nominal concentration.

Microorganisms/Effect on activated sludge

Toxicity to microorganisms

DIN EN ISO 8192-OECD 209-88/302/EEC, P. C aerobic activated sludge, domestic/EC20 (30 min): > 1,000 mg/l

DIN 38412 Part 8 aerobic

bacterium/EC10 (16 h): 140 mg/l

The details of the toxic effect relate to the nominal concentration.

Persistence and degradability

Assessment biodegradation and elimination (H2O)

Not readily biodegradable (by OECD criteria). The product is biodegradable after extended adaptation.

Elimination information

0 - 10 % DOC reduction (28 d) (OECD 301E/92/69/EEC, C.4-B) (aerobic, activated sludge, domestic)

70 - 80 % DOC reduction (35 d) (OECD Guideline 302 B) (aerobic, activated sludge, domestic, adapted)

Bioaccumulative potential

Assessment bioaccumulation potential

Because of the n-octanol/water distribution coefficient (log Pow) accumulation in organisms is not to be expected.

Bioaccumulation potential

Because of the n-octanol/water distribution coefficient (log Pow) accumulation in organisms is not to be expected.

Mobility in soil

Assessment transport between environmental compartments

The substance will not evaporate into the atmosphere from the water surface.

Safety Data Sheet

Uvinul® MS 40

Revision date : 2018/10/15
Version: 6.0

Page: 10/11
(30035116/SDS_COS_CA/EN)

Adsorption to solid soil phase is not expected.

13. Disposal considerations

Waste disposal of substance:

Must be disposed of or incinerated in accordance with local regulations.

Container disposal:

Do not reuse containers without commercial reconditioning. Packs that cannot be cleaned should be disposed of in the same manner as the contents. Recommend crushing, puncturing or other means to prevent unauthorized use of used containers.

14. Transport Information

Land transport

TDG

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

Federal Regulations

Registration status:

Chemical DSL, CA released / listed

Cosmetic DSL, CA released / listed

Food DSL, CA released / listed

Pharma DSL, CA released / listed

NFPA Hazard codes:

Health: 2 Fire: 1 Reactivity: 0 Special:

16. Other Information

SDS Prepared by:

BASF NA Product Regulations
SDS Prepared on: 2018/10/15

Safety Data Sheet

Uvinul® MS 40

Revision date : 2018/10/15

Page: 11/11

Version: 6.0

(30035116/SDS_COS_CA/EN)

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