



We create chemistry

Safety Data Sheet

LF02 Low VOC Flattener

Revision date : 2024/02/29
Version: 9.1

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(30755856/SDS_GEN_CA/EN)

1. Identification

Product identifier used on the label

LF02 Low VOC Flattener

Recommended use of the chemical and restriction on use

Recommended use*: Paints, Coatings and Related Materials; for industrial use only

Unsuitable for use: Not intended for sale to or use by the general public.

* 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.
5025 Creekbank Road
Building A, Floor 2
Mississauga, ON, L4W 0B6, CANADA

Telephone: +1 289 360-1300

Emergency telephone number

24 Hour Emergency Response Information

CHEMTREC: 1-800-424-9300

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

Other means of identification

Chemical family: Coating

2. Hazards Identification

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

Classification of the product

| | | |
|-----------------|-----------------------------|-----------------------------------|
| Eye Dam./Irrit. | 2A | Serious eye damage/eye irritation |
| Skin Sens. | 1 | Skin sensitization |
| Repr. | 1 (unborn child, fertility) | Reproductive toxicity |
| Flam. Liq. | 2 | Flammable liquids |

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| | | |
|-------------------|---|--|
| Aquatic Acute | 3 | Hazardous to the aquatic environment - acute |
| Aquatic Chronic | 3 | Hazardous to the aquatic environment - chronic |
| Skin Corr./Irrit. | 2 | Skin corrosion/irritation |
| Carc. | 2 | Carcinogenicity |
| STOT SE | 3 (May cause drowsiness and dizziness.) | Specific target organ toxicity — single exposure |

Label elements

Pictogram:



Signal Word:
Danger

Hazard Statement:

| | |
|------|--|
| H225 | Highly flammable liquid and vapour. |
| H315 | Causes skin irritation. |
| H317 | May cause an allergic skin reaction. |
| H319 | Causes serious eye irritation. |
| H336 | May cause drowsiness or dizziness. |
| H351 | Suspected of causing cancer. |
| H360 | May damage fertility. May damage the unborn child. |
| H412 | Harmful to aquatic life with long lasting effects. |

Precautionary Statements (Prevention):

| | |
|------|--|
| P210 | Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. |
| P280 | Wear protective gloves, protective clothing and eye protection or face protection. |
| P261 | Avoid breathing mist or vapour or spray. |
| P264 | Wash contaminated body parts thoroughly after handling. |
| P271 | Use only outdoors or in a well-ventilated area. |
| P242 | Use non-sparking tools. |
| P241 | Use explosion-proof electrical, ventilating and lighting equipment. |
| P243 | Take action to prevent static discharges. |
| P233 | Keep container tightly closed. |
| P240 | Ground and bond container and receiving equipment. |
| P202 | Do not handle until all safety precautions have been read and understood. |
| P272 | Contaminated work clothing should not be allowed out of the workplace. |
| P273 | Avoid release to the environment. |
| P201 | Obtain special instructions before use. |

Precautionary Statements (Response):

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P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P312 Call a POISON CENTER or physician if you feel unwell.
P302 + P352 IF ON SKIN: Wash with plenty of soap and water.
P370 + P378 In case of fire: Use water spray for extinction.
P362 + P364 Take off contaminated clothing and wash it before reuse.
P333 + P313 If skin irritation or rash occurs: Get medical attention.
P303 + P361 + P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower.
P304 + P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P337 + P313 If eye irritation persists: Get medical attention.
P308 + P313 IF exposed or concerned: Get medical attention.

Precautionary Statements (Storage):

P403 + P233 Store in a well-ventilated place. Keep container tightly closed.
P403 + P235 Store in a well-ventilated place. Keep cool.
P405 Store locked up.

Precautionary Statements (Disposal):

P501 Dispose of contents and container to hazardous or special waste collection point.

Hazards not otherwise classified

No applicable information available.

3. Composition / Information on Ingredients

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

4-Chloro-.alpha.,.alpha.,.alpha.-trifluorotoluene

CAS Number: 98-56-6
Content (W/W): ≥ 50.0 - $< 75.0\%$
Synonym: No data available.

Acetone

CAS Number: 67-64-1
Content (W/W): ≥ 7.0 - $< 10.0\%$
Synonym: 2-Propanone Acetone; Dimethyl ketone

n-Butyl acetate

CAS Number: 123-86-4
Content (W/W): ≥ 5.0 - $< 7.0\%$
Synonym: Essigsäure-n-butylester

Silane, dichlorodimethyl-, reaction products with silica

CAS Number: 68611-44-9
Content (W/W): ≥ 3.0 - $< 5.0\%$
Synonym: Dichlorodimethylsilane reaction products with silica

bis(1,2,2,6,6-pentamethyl-4-piperidyl)sebacate

CAS Number: 41556-26-7
Content (W/W): ≥ 1.0 - $< 3.0\%$
Synonym: Decanedioic acid bis(1,2,2,6,6-pentamethyl-4-piperidiny) ester

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Methyl 1,2,2,6,6-pentamethyl-4-piperidyl sebacate
CAS Number: 82919-37-7
Content (W/W): ≥ 0.3 - $< 1.0\%$
Synonym: Decanedioic acid, 1-methyl 10-(1,2,2,6,6-pentamethyl-4-piperidinyl) ester

polyaminoamide salt
CAS Number: 162627-17-0
Content (W/W): ≥ 0.3 - $< 1.0\%$
Synonym: No data available.

dibutyltin dilaurate
CAS Number: 77-58-7
Content (W/W): ≥ 0.1 - $< 0.2\%$
Synonym: Dibutylbis[1-oxododecyl]oxy]stannane; Dibutyltin dilaurate

4. First-Aid Measures

Description of first aid measures

General advice:

Remove contaminated clothing.

If inhaled:

Keep patient calm, remove to fresh air. If breathing difficulties develop, aid in breathing and seek immediate medical attention.

If on skin:

Seek medical attention. Immediately wash affected area with soap and water for 20-30 minutes or until chemical is removed. Immediately wash thoroughly with soap and water, seek medical attention.

If in eyes:

Flush with copious amounts of water for at least 15 minutes. Hold eyelids open to facilitate rinsing. If irritation develops, seek medical attention. Seek medical attention.

If swallowed:

Immediate medical attention required. Never induce vomiting or give anything by mouth if the victim is unconscious or having convulsions. Do not induce vomiting. Rinse mouth and then drink 200-300 ml of water.

Most important symptoms and effects, both acute and delayed

Symptoms: Information, i.e. additional information on symptoms and effects may be included in the GHS labeling phrases available in Section 2 and in the Toxicological assessments available in Section 11.

Information on: Acetone

Symptoms: Overexposure may cause:, Eye irritation, irritates the eyes and respiratory tract, skin irritation, erythema, nausea, headache, vomiting, dizziness, diarrhea, abdominal cramps, CNS depression

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Information on: dibutyltin dilaurate

Symptoms: Overexposure may cause: , unconsciousness, vomiting, abdominal cramps, dyspnea, diarrhea, coughing

Information on: n-Butyl acetate

Symptoms: Overexposure may cause: , unconsciousness, vomiting, weakness, coordination disorder, nausea, diarrhea, coughing, headache

Information on: bis(1,2,2,6,6-pentamethyl-4-piperidyl)sebacate

Symptoms: Overexposure may cause: , skin irritation, erythema, nausea, headache, vomiting, dizziness, diarrhea, abdominal cramps

Information on: Methyl 1,2,2,6,6-pentamethyl-4-piperidyl sebacate

Symptoms: Overexposure may cause: , skin irritation, erythema, nausea, headache, vomiting, dizziness, diarrhea, abdominal cramps

Information on: 4-Chloro-.alpha.,.alpha.,.alpha.-trifluorotoluene

Symptoms: Overexposure may cause: , lethargy, nausea, headache, dizziness

Hazards: No applicable information available.

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

Suitable extinguishing media:

carbon dioxide, foam, dry powder, water spray

Unsuitable extinguishing media for safety reasons:

water jet

Special hazards arising from the substance or mixture

Hazards during fire-fighting:

Vapors and/or decomposition products are irritant and/or toxic. If product is heated above decomposition temperature acrid smoke and fumes will be released.

Advice for fire-fighters

Protective equipment for fire-fighting:

Firefighters should be equipped with self-contained breathing apparatus and turn-out gear.

Further information:

Avoid water contamination in closed containers of confined areas, because carbon dioxide gas is generated. Notify proper authorities. Do not flood burning material with water due to potential spreading of fire. Flash fire may occur. Run-off water from fire may cause pollution. Contain contaminated water/firefighting water. Remove product from areas of fire, or otherwise cool sealed containers with water in order to avoid pressure build up due to heat. Vapours are heavier than air and may accumulate in low areas and travel a considerable distance up to the source of ignition.

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6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

Avoid contact with skin and eyes. Use antistatic tools. Extinguish sources of ignition nearby and downwind. Avoid prolonged inhalation. Wear suitable personal protective clothing and equipment. Ensure adequate ventilation.

Environmental precautions

Do not discharge into drains/surface waters/groundwater.

Methods and material for containment and cleaning up

Dike spillage. Spills should be contained, solidified, and placed in suitable containers for disposal. Place into appropriately labeled waste containers. Remove containers to a safe place, cover loosely, and allow to stand for 24 to 48 hours before sealing and disposing.

7. Handling and Storage

Precautions for safe handling

Handle and open container with care. WARNING: Empty containers may still contain hazardous residue. Caution: Contains lead compounds. Ensure adequate ventilation. Avoid contact with the skin, eyes and clothing.

Protection against fire and explosion:

Risk of explosion if heated under confinement. Use antistatic tools. Exhaust fans should be explosion proof. Avoid all sources of ignition: heat, sparks, open flame. Provide adequate ventilation to remove solvent vapors from lower levels or work areas and to prevent solvent contact with ignition sources. Sealed containers should be protected against heat as this results in pressure build-up.

Conditions for safe storage, including any incompatibilities

Segregate from strong bases. Segregate from oxidizing agents. Segregate from incompatible substances. Segregate from strong acids.

Further information on storage conditions: Keep container tightly closed. Protect from direct sunlight.

Storage stability:

Consult local fire marshal for storage requirements.
Protect from temperatures above: 50 °C

8. Exposure Controls/Personal Protection

Components with occupational exposure limits

| | | |
|---------|------------|-----------------------------|
| Acetone | ACGIH, US: | TWA value 250 ppm ; |
| | ACGIH, US: | STEL value 500 ppm ; |
| | OSHA Z1: | PEL 1,000 ppm 2,400 mg/m3 ; |

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| | | |
|---|--|--|
| dibutyltin dilaurate | ACGIH, US: ACGIH, US: OSHA Z1: ACGIH, US: | TWA value 0.1 mg/m3 (tin (Sn)); STEL value 0.2 mg/m3 (tin (Sn)); PEL 0.1 mg/m3 (tin (Sn)); Skin Designation (tin (Sn)); Danger of cutaneous absorption |
| n-Butyl acetate | ACGIH, US: ACGIH, US: OSHA Z1: | STEL value 150 ppm ; TWA value 50 ppm ; PEL 150 ppm 710 mg/m3 ; |
| Silane, dichlorodimethyl-, reaction products with silica | OSHA Z3: OSHA Z3: ACGIH, US: ACGIH, US: OSHA Z3: OSHA Z3: OSHA Z3: OSHA Z3: | TWA value 0.8 mg/m3 ; The exposure limit is calculated from the equation, $80\text{mg/m}^3 / (\% \text{SiO}_2)$, using a value of 100% SiO ₂ . Lower percentages of SiO ₂ will yield higher exposure limits. TWA value 20 millions of particles per cubic foot of air ; TWA value 3 mg/m3 Respirable particles ; TWA value 10 mg/m3 Inhalable particles ; TWA value 50 millions of particles per cubic foot of air Total dust ; TWA value 5 mg/m3 Respirable fraction ; TWA value 15 mg/m3 Total dust ; TWA value 15 millions of particles per cubic foot of air Respirable fraction ; |

Advice on system design:

Provide local exhaust ventilation to maintain recommended P.E.L.

Personal protective equipment

Respiratory protection:

Do not exceed the maximum use concentration for the respirator facepiece/cartridge combination. Respiratory protection may not be required under normal operating conditions if adequate ventilation is provided. Wear a NIOSH-certified (or equivalent) acid gas respirator. Wear a NIOSH-certified (or equivalent) amine/organic vapor respirator. Particulate filters should be added during spray operations. Wear respiratory protection if ventilation is inadequate.

Hand protection:

Use appropriate chemically impervious gloves as determined by an evaluation of glove performance characteristics and the hazards and potential hazards identified, including but not limited to butyl, natural and synthetic rubber, nitrile, or neoprene.

Eye protection:

Wear face shield if splashing hazard exists. Tightly fitting safety goggles (chemical goggles).

Body protection:

Body protection must be chosen based on level of activity and exposure.

General safety and hygiene measures:

Work place should be equipped with a shower and an eye wash. Remove contaminated clothing. Remove contaminated clothing immediately and clean before re-use or dispose it if necessary. Contact lenses should not be worn. Hands and/or face should be washed before breaks and at the end of the shift.

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9. Physical and Chemical Properties

| | | |
|---|---|--------------|
| Form: | liquid | |
| Odour: | No data available. | |
| Odour threshold: | No applicable information available. | |
| Colour: | milky white | |
| pH value: | No applicable information available. | |
| Melting point: | No applicable information available. | |
| Freezing point: | No applicable information available. | |
| Boiling range: | No applicable information available. | |
| Sublimation point: | No applicable information available. | |
| Flash point: | > 11 °C | (ASTM D3278) |
| | The product burns self-sustainingly | |
| Flammability: | No applicable information available. | |
| Lower explosion limit: | No applicable information available. | |
| Upper explosion limit: | No applicable information available. | |
| Autoignition: | No applicable information available. | |
| Vapour pressure: | No applicable information available. | |
| Density: | 1.244 g/cm ³ (20 °C) | |
| Relative density: | 1.244 (20 °C) | |
| Vapour density: | No applicable information available. | |
| Partitioning coefficient n-octanol/water (log Pow): | No applicable information available. | |
| Thermal decomposition: | No applicable information available. | |
| Viscosity, dynamic: | No applicable information available. | |
| Viscosity, kinematic: | 20.7 mm ² /s (23 °C) (40 °C) | |
| | No data available. | |
| Solubility in water: | No applicable information available. | |
| Solubility (quantitative): | No applicable information available. | |
| Solubility (qualitative): | No applicable information available. | |
| Molar mass: | No applicable information available. | |
| Evaporation rate: | No applicable information available. | |

10. Stability and Reactivity

Reactivity

No applicable information available.

Chemical stability

The product is chemically stable.

Possibility of hazardous reactions

No applicable information available.

Conditions to avoid

Avoid all sources of ignition: heat, sparks, open flame. Avoid electro-static discharge.

Incompatible materials

strong oxidizing agents, strong bases, strong acids

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Hazardous decomposition products

Decomposition products:
carbon dioxide, carbon monoxide

Thermal decomposition:
No applicable information available.

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.

Acute Toxicity/Effects

Acute toxicity

Assessment of acute toxicity: Based on available data, the classification criteria are not met.

Oral

Type of value: ATE

Value: > 2,000 mg/kg

The product has not been tested. The statement has been derived from the properties of the individual components.

Inhalation

Type of value: ATE

Value: > 20 mg/l

The product has not been tested. The statement has been derived from the properties of the individual components.

Dermal

Type of value: ATE

Value: > 2,000 mg/kg

The product has not been tested. The statement has been derived from the properties of the individual components.

Assessment other acute effects

Assessment of STOT single:

Possible narcotic effects (drowsiness or dizziness).

Irritation / corrosion

Assessment of irritating effects: Eye contact causes irritation. Skin contact causes irritation.

Sensitization

Assessment of sensitization: Sensitization after skin contact possible.

Aspiration Hazard

No aspiration hazard expected.

Chronic Toxicity/Effects

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Repeated dose toxicity

Assessment of repeated dose toxicity: Based on available data, the classification criteria are not met.

Genetic toxicity

Assessment of mutagenicity: Based on available data, the classification criteria are not met.

Information on: dibutyltin dilaurate

Assessment of mutagenicity: Mutagenic properties can not be excluded on the basis of experimental data.

Carcinogenicity

Assessment of carcinogenicity: Indication of possible carcinogenic effect in animal tests.

Information on: 4-Chloro-.alpha.,.alpha.,.alpha.-trifluorotoluene

Assessment of carcinogenicity: Indication of possible carcinogenic effect in animal tests. On the basis of currently available information, a final assessment is not possible.

IARC (International Agency for Research on Cancer) has classified this substance as group 2B (The agent is possibly carcinogenic to humans). NTP listed as reasonably anticipated to be a human carcinogen.

Reproductive toxicity

Assessment of reproduction toxicity: Causes impairment of fertility in laboratory animals.

Information on: Acetone

Assessment of reproduction toxicity: As shown in animal studies, the product may cause damage to the testes after repeated high exposures that cause other toxic effects.

Information on: dibutyltin dilaurate

Assessment of reproduction toxicity: Causes impairment of fertility in laboratory animals. The product has not been tested. The statement has been derived from substances/products of a similar structure or composition.

Information on: bis(1,2,2,6,6-pentamethyl-4-piperidyl)sebacate

Assessment of reproduction toxicity: The results of animal studies suggest a fertility impairing effect. The product has not been tested. The statement has been derived from substances/products of a similar structure or composition.

Information on: Methyl 1,2,2,6,6-pentamethyl-4-piperidyl sebacate

Assessment of reproduction toxicity: The results of animal studies suggest a fertility impairing effect. The product has not been tested. The statement has been derived from substances/products of a similar structure or composition.

Information on: 4-Chloro-.alpha.,.alpha.,.alpha.-trifluorotoluene

Assessment of reproduction toxicity: The potential to impair fertility cannot be excluded when given at high doses. On the basis of currently available information, a final assessment is not possible. No reproductive toxic effects reported.

Teratogenicity

Assessment of teratogenicity: The substance caused malformations/developmental toxicity in laboratory animals.

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Information on: dibutyltin dilaurate

Assessment of teratogenicity: The substance caused malformations/developmental toxicity in laboratory animals. The product has not been tested. The statement has been derived from substances/products of a similar structure or composition.

Information on: bis(1,2,2,6,6-pentamethyl-4-piperidyl)sebacate

Assessment of teratogenicity: In animal studies the substance did not cause malformations. The potential to cause toxicity to development cannot be excluded at maternally toxic doses.

Information on: Methyl 1,2,2,6,6-pentamethyl-4-piperidyl sebacate

Assessment of teratogenicity: In animal studies the substance did not cause malformations. The potential to cause toxicity to development cannot be excluded at maternally toxic doses.

12. Ecological Information

Toxicity

Aquatic toxicity

Assessment of aquatic toxicity:

Harmful to aquatic life. Harmful to aquatic life with long lasting effects. There are no test results available for this product. Do not allow to enter drains or waterways.

13. Disposal considerations

Waste disposal of substance:

Do not incinerate closed containers. The use and processing of this product, or addition of other constituents, may cause it to be considered a hazardous waste. Do not discharge into drains/surface waters/groundwater.

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

Container disposal:

Do not reuse containers without commercial reconditioning. WARNING: Empty containers may still contain hazardous residue.

14. Transport Information

Land transport

TDG

| | |
|-----------------------|---------|
| Hazard class: | 3 |
| Packing group: | II |
| ID number: | UN 1263 |
| Hazard label: | 3 |
| Proper shipping name: | PAINT |

Sea transport

IMDG

| | |
|----------------|---------|
| Hazard class: | 3 |
| Packing group: | II |
| ID number: | UN 1263 |
| Hazard label: | 3 |

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Marine pollutant: NO
Proper shipping name: PAINT

Air transport

IATA/ICAO
Hazard class: 3
Packing group: II
ID number: UN 1263
Hazard label: 3
Proper shipping name: PAINT

15. Regulatory Information

Federal Regulations

Registration status:

Chemical DSL, CA released / listed

NFPA Hazard codes:

Health: 2 Fire: 3 Reactivity: 0 Special:

16. Other Information

SDS Prepared by:

BASF NA Product Regulations

SDS Prepared on: 2024/02/29

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.

END OF DATA SHEET