

# • SAFETY DATA SHEET

Version 6.8  
Revision Date 03/05/2026  
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## SECTION 1. IDENTIFICATION

### 1.1 Product identifiers

Product name : Flunisolide  
Product Number : F5021  
Brand : Sigma  
CAS-No. : 3385-03-3

### 1.2 Relevant identified uses of the substance or mixture and uses advised against

Identified uses : Laboratory chemicals, Synthesis of substances  
Uses advised against : The product is being supplied under the TSCA R&D Exemption (40 CFR Section 720.36). It is the recipient's responsibility to comply with the requirements of the R&D exemption. The product may not be used for a non-exempt commercial purpose under TSCA unless appropriate consent is granted in writing by MilliporeSigma.

### 1.3 Details of the supplier of the safety data sheet

Company : Sigma-Aldrich Inc.  
3050 SPRUCE ST  
ST. LOUIS MO 63103  
UNITED STATES  
Telephone : +1 314 771-5765  
Fax : +1 800 325-5052

### 1.4 Emergency telephone number

Emergency Phone # : 800-424-9300 CHEMTREC (USA) +1-703-527-3887 CHEMTREC (International) 24 Hours/day; 7 Days/week

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## SECTION 2. HAZARDS IDENTIFICATION

### GHS classification in accordance with the OSHA Hazard Communication Standard (29 CFR 1910.1200)

#### Hazards for the product as supplied

Acute toxicity (Oral) : Category 1

**Other hazards**

None known.

**GHS label elements**

Hazard pictograms

:



Signal word

: Danger

Hazard statements

: H300 Fatal if swallowed.

Precautionary statements

: **Prevention:**

P264 Wash skin thoroughly after handling.

P270 Do not eat, drink or smoke when using this product.

**Response:**

P301 + P310 IF SWALLOWED: Immediately call a POISON CENTER/ doctor.

P321 Specific treatment (see supplemental first aid instructions on this label).

P330 Rinse mouth.

**Storage:**

P405 Store locked up.

**Disposal:**

P501 Dispose of contents/ container to an approved waste disposal plant.

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**SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS**

Substance / Mixture

: Substance

CAS-No.

: 3385-03-3

**Components**

| Chemical name | CAS No./Unique ID | Concentration (% w/w) | Trade secret |
|---------------|-------------------|-----------------------|--------------|
| Flunisolide   | 3385-03-3*        | <= 100                | -            |

\* Indicates that the identifier is a CAS No.

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**SECTION 4. FIRST AID MEASURES**

General advice

: Show this safety data sheet to the doctor in

Sigma - F5021

Page 2 of 12

|   |   |
|---|---|
|   | attendance.   |
| If inhaled  | : After inhalation: fresh air.  |
| In case of skin contact                                     | : In case of skin contact: Take off immediately all contaminated clothing. Rinse skin with water/ shower.   |
| In case of eye contact                                      | : After eye contact: rinse out with plenty of water. Remove contact lenses.   |
| If swallowed  | : If swallowed: give water to drink (two glasses at most). Seek medical advice immediately. In exceptional cases only, if medical care is not available within one hour, induce vomiting (only in persons who are wide awake and fully conscious), administer activated charcoal (20 - 40 g in a 10% slurry) and consult a doctor as quickly as possible. |
| Most important symptoms and effects, both acute and delayed | : The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11   |
| Protection of first-aiders                                  | : For personal protection see section 8.  |
| Notes to physician  | : No data available   |

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## SECTION 5. FIREFIGHTING MEASURES

|  |  |
|--|--|
| Unsuitable extinguishing media                 | : For this substance/mixture no limitations of extinguishing agents are given.   |
| Hazardous combustion products                  | : Carbon oxides<br><br>Hydrogen fluoride   |
| Specific extinguishing methods                 | : No data available  |
| Further information                            | : Suppress (knock down) gases/vapours/mists with a water spray jet.<br>Prevent fire extinguishing water from contaminating surface water or the ground water system. |
| Special protective equipment for fire-fighters | : Stay in danger area only with self-contained breathing apparatus. Prevent skin contact by keeping a safe distance or by wearing suitable protective clothing.      |

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## SECTION 6. ACCIDENTAL RELEASE MEASURES

|   |   |   |
|---|---|---|
| Personal precautions, protective equipment and emergency procedures | : | Advice for non-emergency personnel:<br>Avoid inhalation of dusts.<br>Avoid substance contact.<br>Ensure adequate ventilation.<br>Evacuate the danger area, observe emergency procedures, consult an expert.<br>Advice for emergency responders:<br>For personal protection see section 8. |
| Environmental precautions   | : | Do not let product enter drains.  |
| Methods and materials for containment and cleaning up               | : | Cover drains. Collect, bind, and pump off spills. Observe possible material restrictions (see sections 7 and 10).<br>Take up carefully. Dispose of properly. Clean up affected area.<br>Avoid generation of dusts.  |

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## SECTION 7. HANDLING AND STORAGE

For precautions see section 2.2.

|   |   |   |
|---|---|---|
| Further information on storage conditions | : | Tightly closed.<br>Dry.<br>Keep in a well-ventilated place.<br>Keep locked up or in an area accessible only to qualified or authorised persons. |
| Storage class                             | : | 6.1A, Combustible, acute toxic Cat. 1 and 2 / very toxic hazardous materials  |
| Recommended storage temperature           | : | Recommended storage temperature see product label.  |

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## SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### Ingredients with workplace control parameters

Contains no substances with occupational exposure limit values.

**Engineering measures** : No data available

### Personal protective equipment

Respiratory protection : required when dusts are generated.

Our recommendations on filtering respiratory protection are based on the following standards: DIN

EN 143, DIN 14387 and other accompanying standards relating to the used respiratory protection system.

Recommended Filter type: : Filter type P3

The entrepreneur has to ensure that maintenance, cleaning and testing of respiratory protective devices are carried out according to the instructions of the producer. These measures have to be properly documented.

#### Hand protection

Material : Nitrile rubber  
Break through time : 480 min  
Glove thickness : 0.11 mm  
Protective index : Full contact  
Manufacturer : Dermatril® (KCL 740 / Aldrich Z677272, Size M)

Material : Nitrile rubber  
Break through time : 480 min  
Glove thickness : 0.11 mm  
Protective index : Splash contact  
Manufacturer : Dermatril® (KCL 740 / Aldrich Z677272, Size M)

Manufacturer : data source: KCL GmbH, D-36124 Eichenzell, phone +49 (0)6659 87300, e-mail sales@kcl.de, test method: EN374

Remarks : Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.  
If used in solution, or mixed with other substances, and under conditions which differ from EN 374, contact the supplier of the CE approved gloves. This recommendation is advisory only and must be evaluated by an industrial hygienist and safety officer familiar with the specific situation of anticipated use by our customers. It should not be construed as offering an approval for any specific use scenario.

Eye protection : Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).  
Safety glasses

Skin and body protection : protective clothing

Hygiene measures : Change contaminated clothing. Preventive skin protection recommended. Wash hands after working with substance.

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## SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance : solid

Color : No data available

Odor : No data available

Odor Threshold : No data available  
pH : No data available

Melting point : No data available

Boiling point/boiling range : No data available

Flash point : No data available

Evaporation rate : No data available

Flammability (solid, gas) : No data available

Flammability (liquids) : No data available

Burning rate : No data available

Upper explosion limit /  
Upper flammability limit : No data available

Lower explosion limit /  
Lower flammability limit : No data available

Vapor pressure : No data available

Relative vapour density : No data available

Relative density : No data available

Density : No data available

Water solubility : No data available

Partition coefficient: n-  
octanol/water : No data available

|                           |                     |
|---------------------------|---------------------|
| Autoignition temperature  | : No data available |
| Decomposition temperature | : No data available |
| Viscosity, dynamic        | : No data available |
| Viscosity, kinematic      | : No data available |
| Flow time                 | : No data available |
| Explosive properties      | : No data available |
| Oxidizing properties      | : No data available |
| Molecular weight          | : 434.50 g/mol      |
| Particle characteristics  |                     |
| Particle size             | : No data available |

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## SECTION 10. STABILITY AND REACTIVITY

|                                    |   |
|------------------------------------|---|
| Reactivity                         | : No data available   |
| Chemical stability                 | : The product is chemically stable under standard ambient conditions (room temperature) . |
| Possibility of hazardous reactions | : No data available   |
| Conditions to avoid                | : no information available  |
| Incompatible materials             | : No data available   |
| Hazardous decomposition products   | : In the event of fire: see section 5   |

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## SECTION 11. TOXICOLOGICAL INFORMATION

### 11.1 Information on toxicological effects

#### Acute toxicity

Acute toxicity estimate Oral - 0.5 mg/kg  
(Calculation method)

LD50 Oral - Mouse - > 0.5 mg/kg

Remarks: Behavioral:Somnolence (general depressed activity).

Blood:Aplastic anemia.

Nutritional and Gross Metabolic:Weight loss or decreased weight gain.

TDLo Oral - Rat - 0.630 mg/kg

Remarks: Paternal Effects: Testes, epididymis, sperm duct.

Sigma - F5021

Page 7 of 12

TDL<sub>o</sub> Oral - Rat - 1.05 mg/kg  
TDL<sub>o</sub> Oral - Rat - 1.1 mg/kg  
TDL<sub>o</sub> Oral - Rat - 0.550 mg/kg  
TDL<sub>o</sub> Oral - Rat - 0.026 mg/kg  
Inhalation: No data available  
Dermal: No data available  
LD<sub>50</sub> Intravenous - Rat - > 51 mg/kg  
Remarks: Behavioral:Somnolence (general depressed activity).  
Blood:Aplastic anemia.  
Nutritional and Gross Metabolic:Weight loss or decreased weight gain.  
LD<sub>50</sub> Subcutaneous - Rat - > 46 mg/kg  
Remarks: Behavioral:Somnolence (general depressed activity).  
Blood:Aplastic anemia.  
Nutritional and Gross Metabolic:Weight loss or decreased weight gain.  
LD<sub>50</sub> Intravenous - Mouse - > 0.076 mg/kg  
Remarks: Behavioral:Somnolence (general depressed activity).  
Blood:Aplastic anemia.  
Nutritional and Gross Metabolic:Weight loss or decreased weight gain.  
LD<sub>50</sub> Subcutaneous - Mouse - > 0.290 mg/kg  
Remarks: Behavioral:Somnolence (general depressed activity).  
Blood:Aplastic anemia.  
Nutritional and Gross Metabolic:Weight loss or decreased weight gain.

**Skin corrosion/irritation**

No data available

**Serious eye damage/eye irritation**

Remarks: No data available

**Respiratory or skin sensitization**

No data available

**Germ cell mutagenicity**

No data available

**Carcinogenicity**

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.

NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

OSHA: No component of this product present at levels greater than or equal to 0.1% is on OSHA's list of regulated carcinogens.

**Reproductive toxicity**

No data available

No data available

**Specific target organ toxicity - single exposure**

No data available

**Specific target organ toxicity - repeated exposure**

No data available

**Aspiration hazard**

No data available

**11.2 Additional Information**

No data available

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**SECTION 12. ECOLOGICAL INFORMATION****Ecotoxicity****Components:****Flunisolide:**

Toxicity to fish : Remarks: No data available

**Persistence and degradability****Components:****Flunisolide:**

Biodegradability : Remarks: No data available

**Bioaccumulative potential****Components:****Flunisolide:**

Bioaccumulation : Remarks: No data available

**Mobility in soil****Components:****Flunisolide:**

Stability in soil : Remarks: No data available

**Other adverse effects****Components:****Flunisolide:**

Additional ecological information : No data available

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**SECTION 13. DISPOSAL CONSIDERATIONS****Disposal methods**

Waste from residues : Waste material must be disposed of in accordance with the national and local regulations. Leave chemicals in original containers. No mixing with other waste. Handle uncleaned containers like the product

Sigma - F5021

Page 9 of 12

itself.

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## SECTION 14. TRANSPORT INFORMATION

### International Regulations

#### IATA-DGR

UN/ID No. : UN 2811  
Proper shipping name : Toxic solid, organic, n.o.s.  
(Flunisolide)  
Class : 6.1  
Packing group : I  
Labels : Division 6.1 - Toxic substances  
Packing instruction (cargo : 673  
aircraft)  
Packing instruction : 666  
(passenger aircraft)

#### IMDG-Code

UN number : UN 2811  
Proper shipping name : TOXIC SOLID, ORGANIC, N.O.S.  
(Flunisolide)  
Class : 6.1  
Packing group : I  
Labels : 6.1  
EmS Code : F-A, S-A  
Marine pollutant : no

#### Transport in bulk according to IMO instruments

Not applicable for product as supplied.

### National Regulations

#### 49 CFR Road

UN/ID/NA number : UN 2811  
Proper shipping name : Toxic solids, organic, n.o.s.  
(Flunisolide)  
Class : 6.1  
Packing group : I  
Labels : Division 6.1 - Toxic substances  
ERG Code : 154  
Marine pollutant : no  
  
Poison Inhalation Hazard : No

#### Special precautions for user

The transport classification(s) provided herein are for informational purposes only, and solely based upon the properties of the unpackaged material as it is described within this Safety Data Sheet. Transportation classifications may vary by mode of transportation, package sizes, and variations in regional or country regulations.

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## SECTION 15. REGULATORY INFORMATION

### SARA 302 Extremely Hazardous Substances Threshold Planning Quantity

| Components | CAS-No. | Component TPQ (lbs) |
|------------|---------|---------------------|
|------------|---------|---------------------|

**SARA 311/312 Hazards** : Acute Health Hazard

**SARA 313** : This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

### US State Regulations

#### Massachusetts Right To Know

No components are subject to the Massachusetts Right to Know Act.

#### Pennsylvania Right To Know

Flunisolide 3385-03-3

#### New Jersey Right To Know

Flunisolide 3385-03-3

#### California Prop. 65

WARNING: This product contains a chemical known to the State of California to cause birth defects or other reproductive harm.

**The components of this product are reported in the following inventories:**

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## SECTION 16. OTHER INFORMATION

### Full text of other abbreviations

AIIC - Australian Inventory of Industrial Chemicals; ASTM - American Society for the Testing of Materials; bw - Body weight; CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DOT - Department of Transportation; DSL - Domestic Substances List (Canada); ECx - Concentration associated with x% response; EHS - Extremely Hazardous Substance; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response; ERG - Emergency Response Guide; GHS - Globally Harmonised System; GLP - Good Laboratory Practice; HMIS - Hazardous Materials Identification System; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organisation; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardisation; KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a

test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; MSHA - Mine Safety and Health Administration; n.o.s. - Not Otherwise Specified; NFPA - National Fire Protection Association; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NTP - National Toxicology Program; NZIoC - New Zealand Inventory of Chemicals; OECD - Organisation for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; RCRA - Resource Conservation and Recovery Act; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; RQ - Reportable Quantity; SADT - Self-Accelerating Decomposition Temperature; SARA - Superfund Amendments and Reauthorization Act; SDS - Safety Data Sheet; TCSI - Taiwan Chemical Substance Inventory; TECI - Thailand Existing Chemicals Inventory; TSCA - Toxic Substances Control Act (United States); UN - United Nations; UNRTDG - United Nations Recommendations on the Transport of Dangerous Goods; vPvB - Very Persistent and Very Bioaccumulative

The information is believed to be correct but is not exhaustive and will be used solely as a guideline, which is based on current knowledge of the chemical substance or mixture and is applicable to appropriate safety precautions for the product. It does not represent any guarantee of the properties of the product. Sigma-Aldrich Corporation and its Affiliates shall not be held liable for any damage resulting from handling or from contact with the above product. See [www.sigma-aldrich.com](http://www.sigma-aldrich.com) and/or the reverse side of invoice or packing slip for additional terms and conditions of sale.

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