

Germall Plus Powder
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Date: 04 / 05 / 2021

Version: 1

Cancels and replaces version:

SECTION 1. IDENTIFICATION

| | |
|--------------------------------|---|
| Product Name/Identifier | Germall Plus Powder |
| Product Code | FSSB30050 |
| Recommended Use | Ingredients/Raw materials used in the manufacturing of Cosmetic Products' |
| Restrictions on Use | Refer to the detailed list of labeling/restrictions (Section 15 Regulatory Information) |
| Supplier Site | Formulator Sample Shop |
| Address | 135 Joshua Court Lincoln, NC 28092 |
| Telephone No. (24hrs) | 1-704-276-7540 |

For Hazardous Materials [or Dangerous Goods] Incident Spill, Leak, Fire, Exposure, or Accident Call CHEMTREC:
 +1 703-741-5970 (or) 1-800-424-9300

SECTION 2. HAZARD(S) IDENTIFICATION

GHS Classification:

| | |
|---|---------------------|
| Combustible Dust | |
| Eye Irritation: | Category 2A |
| Skin Sensitization: | Category 1 |
| Specific Target Organ Toxicity – Repeated Exposure: | Category 1 (Larynx) |

GHS Labeling Elements:

Pictogram:



| | |
|---------------------------------------|--|
| Hazard statements/Signal Word: | H261: DANGER: Avoid breathing dust/fume/gas/mist/vapours/spray H317: DANGER: May cause an allergic skin reaction H319: DANGER: Causes serious eye irritation H372: DANGER: Causes damage to organs through prolonged or repeated exposure |
|---------------------------------------|--|

Precautionary statements:

| | |
|--------------------|---|
| Prevention: | P233: Keep container tightly closed P261: Avoid breathing dust/fume/gas/mist/vapors/spray P264: Wash skin thoroughly after handling P270: Do not eat, drink or smoke when using this product P272: Contaminated work clothing should not be allowed out of the workplace P280: Wear protective gloves/protective clothing/eye protection/face protection |
|--------------------|---|

Information contained in this technical literature is believed to be accurate and is offered in good faith for the benefit of the customer. The company, however, cannot assume any liability or risk involved in the use of its chemical products since the conditions of use are beyond our control. Statements concerning the possible use of our products are not intended as recommendations to use our products in the infringement of any patent. We make no warranty of any kind, expressed or implied, other than that the material conforms to the applicable standard specification.

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Response:

P302 + P352: IF ON SKIN: Wash with plenty of soap and water
 P305 + P338 + P351: 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 doctor/physician if you feel unwell
 P333 + P313: If skin irritation or rash occurs: Get medical advice/attention
 P337 + P313: If eye irritation persists: Get medical advice/attention
 P363: Wash contaminated clothing before reuse

Disposal: P501: Dispose of contents/container in accordance with local regulations.

US NFPA 704 (National Fire Protection Association) Hazard Rating System:

Health hazard: Rating 2; Temporary or minor injury may occur
 Flammability: Rating 1; Material must be preheated before ignition will occur
 Reactivity: Rating 0; Stable
 Other Hazard Information: None

Other hazards: None known

SECTION 3. COMPOSITION / INFORMATION ON INGREDIENTS

Common Chemical Name: Diazolidinyl Urea

Chemical Family: Mixture

Description: Mixture: consisting of the following components. This section describes all components of the mixture

| <u>Hazardous Components</u> | <u>CAS Numbers</u> | <u>EC Numbers</u> | <u>Percentage</u> | <u>Classification</u> |
|-----------------------------|--------------------|-------------------|-------------------|--|
| Diazolidinyl Urea | 78491-02-8 | 878-928-2 | 98.9983% | Combustible Dust Eye Irrit. 2A; H319 |
| Iodopropynyl Butylcarbamate | 55406-53-6 | 259-627-5 | 1.0017% | Combustible Dust Acute Tox. 4; H302 Acute Tox. 3; H331 Eye Dam. 1; H318 Skin Sens. 1; H317 STOT SE 3; H335 STOT RE 1; H372 |

SECTION 4. FIRST-AID MEASURES

General: In all cases of doubt, or when symptoms persist, seek medical attention. Move to fresh air from exposure area. Show this Safety Data Sheet to the doctor in attendance. Do not leave victim unattended.

Inhalation: Move to fresh air from exposure area. If unconscious, place in a recovery position and seek medical advice. If symptoms persist, call a physician.

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Skin contact: Take off contaminated clothing and shoes. Call a physician if irritation persists. If on skin, wash with plenty of water. First aid is not normally required. However, it is recommended that exposed areas be cleaned by washing with soap and water. Wash contaminated clothing before re-use.

Eye contact: Immediately rinse with plenty of water. Remove contact lenses. Protect unharmed eye.

Ingestion: Do not give milk or alcoholic beverages. Never give anything by mouth to an unconscious person. If symptoms persist, call a physician.

Most important symptoms and effects, both acute and delayed: See Section 2 and/or 11

Notes to physician: No hazards which require special first aid measures

SECTION 5. FIRE-FIGHTING MEASURES

Extinguishing media:

Suitable: Water spray, foam

Not suitable: High volume water jet

Fire fighting: Product is compatible with standard fire-fighting agents

Protection for fire-fighters: Boots, gloves, goggles and self-contained breathing apparatus

Further information: Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions: Avoid contact with skin and eyes.
Wear Personal Protective Equipment:
- Protective glasses with side-shields
- Protective gloves
- Suitable protective clothing

Use respirator when performing operations involving potential exposure to vapour of the product.

Environmental precautions: Prevent entry into sewers and waterways. Do not allow material to contaminate ground water system. Prevent further leakage or spillage if safe to do so. If the product contaminates rivers, lakes or drains inform respective authorities.

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Methods for cleaning up:

Recovery: Contain spillage, absorb with non-combustible absorbent material and transfer to a container for disposal according to local/national regulations. Persons not wearing protective equipment should be excluded from area of spill until clean-up has been completed.

Cleaning/Decontamination: Material can create slippery conditions.

Disposal: For disposal of residues refer to sections 8 & 13.

SECTION 7. HANDLING AND STORAGE

Handling

Technical measures: Labeling: Keep out of the reach of children. Avoid contact with skin and eyes.

Measures: Avoid dust formation. Do not breathe vapours/dust. Do not permit dust layers to accumulate.

Safe handling advice: Wash hands carefully after use. Avoid storage near feed or food stuff. Smoking, eating and drinking should be prohibited in the application area. Ensure all equipment is electronically grounded and bonded before beginning transfer operations. The material can accumulate static charge and can therefore cause electrical ignition of flammable atmospheres. Persons susceptible to skin sensitization problems or asthma, allergies, chronic or recurrent respiratory disease should not be employed in any process in which this mixture is being used. Container is hazardous when empty. Dispose of rinse water in accordance with local and national regulations.

Storage

Technical measures: Keep container tightly closed in a well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage. No smoking.

Incompatible materials: Avoid contact with heat, flame, sparks and other ignition sources. Refer to the detailed list of incompatible materials (Section 10 Stability/Reactivity)

SECTION 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Precautionary statements: Provide adequate exhaust ventilation at place where dust is formed.

Control parameters

Components with workplace occupational exposure limits: None

Hazardous components without workplace control parameters:

| Ingredient | CAS Number |
|-----------------------------|------------|
| Diazolidinyl Urea | 78491-02-8 |
| Iodopropynyl Butylcarbamate | 55406-53-6 |

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Engineering measures: Provide sufficient mechanical (general and/or local exhaust) ventilation to maintain exposure below exposure guidelines (if applicable) or below levels that cause known, suspected or apparent adverse effects.

Personal Protective Equipment:

Respiratory protection: In the case of dust or aerosol formation use respirator with an approved filter within the capabilities of the respirator/filter combination. Where concentrations are above recommended limits or are unknown, or a cartridge type respirator is not adequate, wear a positive-pressure supplied-air respirator.

Hand protection: Protective gloves (Butyl-rubber break through time 480 min; Thickness > 0.5 mm)
Eye protection: Safety glasses
Collective emergency equipment: Eye fountain.

Skin and Body Protection: Wear as appropriate: Safety shoes, dust impervious protective suit. Choose body protection according to the amount and concentration of the dangerous substance at the work place. Discard gloves that show tears, pinholes, or signs of wear. Wear resistant gloves (consult your safety equipment supplier).

Hygiene measures: Avoid breathing dust. Wash hands before breaks and at the end of the workday. When using do not eat, drink or smoke. Handle in accordance with good industrial hygiene and safety practice.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Fine; Free Flowing Powder
Color: White
Odor: Characteristic

pH (1% Solution): 6.0 – 8.0

Vapor Pressure: Not determined
Vapor Density: Not determined
Density (20°C): 1 g/cm³
Relative Vapour Density: Not determined

Microbial Content: <100 opg; No Pathogens

Boiling Point: Not determined
Melting point: Not determined

Flash point: Not applicable

Evaporation rate: Not determined

Solubility:
In water: Soluble
In organic solvents: Not determined

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SECTION 10. STABILITY AND REACTIVITY

| | |
|--|---|
| Reactivity: | No decomposition if stored and applied as directed. |
| Stability: | Stable under recommended storage conditions. |
| Hazardous reactions: | Dust may form explosive mixture in air |
| Conditions to avoid: | Keep away from heat, flame, sparks and other ignition sources |
| Materials to avoid: | Carbon dioxide, carbon monoxide & iodine compounds |
| Hazardous decomposition products: | Carbon dioxide & carbon monoxide |

SECTION 11. TOXICOLOGICAL INFORMATION

| | |
|---|--|
| Acute Toxicity: | Not classified based on available information |
| Skin Corrosion/Irritation: | Not classified based on available information REMARK: May cause skin irritation in susceptible persons. |
| Serious Eye Damage/Eye Irritation: | Causes serious eye irritation REMARK: Product dust may be irritating to eyes, skin and respiratory system. |
| Respiratory or Skin Sensitization: | Skin sensitization: May cause an allergic skin reaction Respiratory sensitization: Not classified based on available information |
| Germ Cell Mutagenicity: | Not classified based on available information |
| Carcinogenicity: | Not classified based on available information |
| Reproductive Toxicity: | Not classified based on available information |
| STOT- Single Exposure: | Not classified based on available information |
| STOT- Repeated Exposure: | Causes damage to organs (larynx) through prolonged or repeated exposure |
| Aspiration Toxicity: | Not classified based on available information |
| Carcinogenicity: | |
| IARC: | No component of this product is present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC. |
| OSHA: | No component of this product is present at levels greater than or equal to 0.1% is on OSHA's list of regulated carcinogens. |
| NTP: | No component of this product is present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP. |

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The following ecotoxicological data refer to:**Diazolidinyl Urea:****Acute Toxicity:**

Acute Oral Toxicity: > 2,000 mg/kg
LD₅₀ (Rat, OPPTS 870.1100)

Acute Dermal Toxicity: > 2,000 mg/kg
LD₅₀ (Rabbit, OPPTS 870.1200)
Not classified as acutely toxic by dermal absorption under GHS

Skin Corrosion/Irritation: Non-Irritant (Rabbit, OPPTS 870.2500)**Serious Eye Damage/Eye Irritation:** Irritant (Rabbit, OPPTS 870.2400)**Respiratory or Skin Sensitization:** Non-sensitizing (Guinea pig, Maximisation Test, OECD Test Guideline 406)**Germ Cell Mutagenicity:**

Genotoxicity in vitro: Non-Mutagenic (AMES, OECD Test Guideline 471)
Negative (Chromosome aberration, OECD Test Guideline 473)

Genotoxicity in vivo: Non-Mutagenic (Mouse, Micronucleus test, OECD Test Guideline 474)
Negative (Rat, Unscheduled DNA Synthesis, OECD Test Guideline 486)

Reproductive Toxicity:

Effects on Foetal Development: Embryo-foetal development - 500 mg/kg food (Rat, oral)

Repeated Dose Toxicity: NOEL: 200 mg/kg (Rat, oral, 90 days)**The following ecotoxicological data refer to:****Iodopropynyl Butylcarbamate:****Acute Toxicity:**

Acute Oral Toxicity: 1,153 mg/kg
LD₅₀ (Rat)

Acute Inhalation Toxicity: 0.67 mg/l
LC₅₀ (Rat, 4hr, dust/mist)

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Acute Dermal Toxicity: > 5,000 mg/kg
LD₅₀ (Rat)

Skin Corrosion/Irritation: Slight, transient irritation

Serious Eye Damage/Eye Irritation: Corrosive

Respiratory or Skin Sensitization: May cause sensitization by skin contact

STOT-Single Exposure: May cause respiratory irritation

STOT-Repeated Exposure: Larynx – The substance or mixture is classified as specific target organ toxicant, repeated exposure, Category 1

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity

Ecotoxicology Assessment Short-term (acute) aquatic hazard: Acute aquatic toxicity Category 2 – Toxic to aquatic life

Long-term (chronic) aquatic hazard: Chronic aquatic toxicity Category 3 – Harmful to aquatic life with long lasting effects

Ecotoxicology Assessment Long-term (chronic) aquatic hazard: Not classified based on available information

The following ecotoxicological data refer to:

Diazolidinyl Urea:

Exotoxicity:

Toxicity to fish: > 100 mg/l
LC₅₀ (Fish, 96h):

Toxicity to Daphnia and Other
Aquatic Invertebrates: 58 mg/l
EC₅₀ (Daphnia magna (Water flea), 48h)
Flow-through test

Toxicity to algae: 5.78 mg/l
ErC₅₀ (Selenastrum capricornutum (green algae), 72h)
Growth Inhibition

Persistence & Degradability:

Biodegradability: Not readily biodegradable – 24% biodegradation
Directive 67/548/EEC Annex V, C.4.C, 28d

Stability in Water: Degradation half life (DT₅₀): 12h (20.4°C, pH 7)

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Bioaccumulative potential:

Bioaccumulation: The substance has low potential for bioaccumulation

Partition coefficient: n-octanol/water: log Pow: 0.9 (20°C)

Mobility in soil:

Distribution among environmental compartments: Koc: < 2 (Adsorption/Soil; Medium: Soil)

Results of PBT and vPvB assessment:

This substance is not considered to be persistent, bioaccumulating and toxic (PBT). This substance is not considered to be very persistent and very bioaccumulating (vPvB).

The following ecotoxicological data refer to:
Iodopropynyl Butylcarbamate:
Exotoxicity:

 Toxicity to fish: 0.067 mg/l
 LC₅₀ (Oncorhynchus mykiss (rainbow trout), 96h):

 Toxicity to Daphnia and Other
 Aquatic Invertebrates: 0.16 mg/l
 EC₅₀ (Daphnia magna (Water flea), 48h)

 Toxicity to algae: 0.022 mg/l
 EC₅₀ (Selenastrum capricornutum (green algae), 72h)

M-Factor (Short-term (acute) aquatic hazard: 10

 Toxicity to fish (Chronic): 0.0084 mg/l
 NOEC (Pimephales promelas (fathead minnow), 35d):

 Toxicity to Daphnia and Other
 Aquatic Invertebrates (Chronic): 0.05 mg/l
 NOEC (Daphnia magna (Water flea), 21d)

M-Factor (Long-term (chronic) aquatic hazard: 10

Persistence & Degradability:

Biodegradability: Rapidly Biodegradable

Bioaccumulative potential:

Bioaccumulation: 4.5 – Bioaccumulation is unlikely (Cyprinus carpio (Carp))

Partition coefficient: n-octanol/water: log Pow: 2.81

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SECTION 13. DISPOSAL CONSIDERATIONS**Residues from product**

Prohibition: Do not allow the product to be released into the Environment. Do not contaminate ponds, waterways or ditches with chemical or used container.

Destruction/Disposal: Contact waste disposal services. Dispose of in accordance with all relevant local, state and federal regulations.

Contaminated packaging

Decontamination/cleaning: Empty remaining contents. Dispose of contents as unused product. Empty containers should be taken to an approved waste handling site for recycling or disposal.

Destruction/Disposal: Do not re-use empty containers.

Note: Take all necessary precautions when disposing of this product according to local regulations.

SECTION 14. TRANSPORT INFORMATION

UN Number: None

UN Shipping Name: None

Land (rail/road): Material is not restrictive for land transport and is not regulated by ADR/RID

Sea: Material is not restrictive for sea transport and is not regulated by IMO/IMDG

Air: Material is not restrictive for air transport and is not regulated by ICAO/IATA

Marine Pollutant: No

Transport/Additional Information: Not regulated for US DOT Transport in non-bulk containers
This material is not dangerous or hazardous

Special Precautions for User: None known

The above regulatory prescriptions are those valid on the date of publication of this sheet. However, given the possible evolution of transport regulations for hazardous materials and in the event of the MSDS in your possession dating back more than 12 months, it is advisable to check their validity with your sales office.

SECTION 15. REGULATORY INFORMATION**Labeling/Restrictions:****EC regulations:**

Restrictions: Prohibited in aerosol dispensers (sprays)
Not to be used in oral hygiene and lip care products
Not to be used in in preparations for children under 3, except bath products/shower gels and shampoos

Labeling Requirements/Warnings: Protect cuticles with grease or oil; Contains formaldehyde
Contains Iodine (for leave-on products over 0.02%)

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USA regulations:

Restrictions: Prohibited in aerosol dispensers (sprays)
 This material contains Diazolidinyl Urea, which is considered a formaldehyde donor. Formaldehyde is listed on the California Proposition 65 list.

Japanese regulations:

Restrictions: Diazolidinyl Urea is not on Japan's allowed formaldehyde-donor type preservatives list

Canada regulations:

Restrictions: Prohibited in aerosol dispensers (sprays)

China regulations:

Restrictions: Prohibited in aerosol dispensers (sprays)
 Not to be used in oral health and lip products
 Labeling Requirements/Warnings: Contains Iodine (for leave-on products over 0.02%)

Brazil regulations:

Restrictions: Prohibited in aerosol dispensers (sprays)
 Not to be used in oral products or use around the lips
 Labeling Requirements: Protect cuticles with wax or oil; Contains formaldehyde
 Contains Iodine (for leave-on products over 0.02%)

ASEAN regulations:

Restrictions: Prohibited in aerosol dispensers (sprays)
 Not to be used in oral hygiene and lip care products
 Not to be used in in preparations for children under 3, except bath products/shower gels and shampoos
 Labeling Requirements: Contains formaldehyde

Mexico regulations:

Restrictions: Prohibited in aerosol dispensers (sprays); Not for children or infants
 Not to be used in lip products

Federal Regulations:
US EPA EPCRA (Emergency Planning and Community Right-to-Know Act):
US. EPA CERCLA Hazardous Substances and Reportable Quantities (40 CFR 302.4):

This material does not contain any components with a CERCLA RQ

SARA 302:

This material does not contain any components with a section 302 EHS TPQ.

SARA 304 Extremely Hazardous Substances Reportable Quantity:

This material does not contain any components with a section 304 EHS RQ.

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SARA Hazard Designation Sections 311/312 (40 CFR 370):

Combustible dust
 Serious eye damage or eye irritation
 Respiratory or skin sensitization
 Specific target organ toxicity (single or repeated exposure)

Section 313 Toxic Chemicals (40 CFR 372.65):

The following components are subject to reporting levels established by SARA Title III, Section 313:

| Ingredient | CAS Number | % |
|-----------------------------|------------|-------|
| Iodopropynyl Butylcarbamate | 55406-53-6 | 1.00% |

Pennsylvania Right to Know:

| Components | CAS Number |
|-------------------|------------|
| Diazolidinyl Urea | 78491-02-8 |

New Jersey Right to Know:

| Components | CAS Number |
|-----------------------------|------------|
| Diazolidinyl Urea | 78491-02-8 |
| Iodopropynyl Butylcarbamate | 55406-53-6 |

Other regulations:

| | | |
|---------------------------------------|---|-----------|
| EINECS inventory status: | Diazolidinyl Urea: | 878-928-2 |
| | Iodopropynyl Butylcarbamate: | 259-627-5 |
| TSCA inventory status: | Exempt | |
| AICS inventory status: | 78491-02-8 & 55406-53-6 | |
| Canadian (CEPA DSL) inventory status: | Listed as Urea, N-[1,3-bis(hydroxymethyl)-2,5-dioxo-4-imidazolidinyl]-N,N'-bis(hydroxymethyl)- (DSL) & Carbamic acid, butyl-, 3-iodo-2-propynyl ester (DSL) | |
| Japan (MITI list): | Not Allowed: Diazolidinyl Urea | |
| | Listed: Iodopropynyl Butylcarbamate | |
| Korea: | Diazolidinyl Urea & Iodopropynyl Butylcarbamate | |
| China inventory status: | Diazolidinyl Urea & Iodopropynyl Butylcarbamate | |
| Philippines inventory status: | Listed as: Urea, N-[1,3-bis(hydroxymethyl)-2,5-dioxo-4-imidazolidinyl]-N,N'-bis(hydroxymethyl)- & Carbamic acid, butyl-, 3-iodo-2-propynyl ester | |

Note: The regulatory information given above only indicates the principal regulations specifically applicable to the products described in this sheet. The user's attention is drawn to the possible existence of additional provision which complete these regulations. Please refer to all applicable international, national and local regulations and provisions

SECTION 16. OTHER INFORMATION

Prohibited uses: For specific uses, food industry, ask the manufacturer for more information.

Last Revision Date: N/A

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MSDS summary of changes No deletion, addition or revision to date

The information given is based on our knowledge of this product, at the time of publication in good faith. The attention of the user is drawn to the possible risks incurred by using the product for any other purpose other than which it was intended. This is not in any way excuse the user from knowing and applying all the regulations governing their activity. It is sole responsibility of the user to take all precautions required in handling the product. The purpose of mandatory regulation mentioned is to help the user to fulfill his obligations regarding the use of products. This information is not exhaustive, this is not exonerate the user from ensuring that legal obligations other than those mentioned, relating to the use and storage.