SAFETY DATA SHEET

1. Identification

Product identifier Flosan NFS
Recommended use For Industrial Use Only
Recommended restrictions None Known.

Manufacturer/Supplier information

Company name: FRC Global
Address: 1000 N. West St.
Suite 1200 #3008
Wilmington, DE 19801
Product Support/Technical Services
Phone: (514) 931-5711
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2. Hazard(s) identification

Classified hazards This item is defined as an article per OSHA (29 CFR 1910.1200) and is therefore exempt from labeling. A Safety Data Sheet is available.
This item is not hazardous per OSHA 29 CFR 1910.1200(c). However, individual customer processes (such as grinding, sawing, or blasting) may result in the formation of dust that may present health hazards. May cause respiratory irritation, lung injury, or cancer by inhalation. Limit skin contact. Wash hands after handling. Dispose of waste and residues in accordance with local authority requirements. Wear protective gloves/protective clothing/eye protection. Dust may cause cancer.

Label elements This item is defined as an article per OSHA (29 CFR 1910.1200) and is therefore exempt from labeling. A Safety Data Sheet is available.
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Hazard(s) not otherwise classified (HNOC)

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3. Composition/information on ingredients

Chemical Name	Common Name/Synonyms	CAS Number	%
Chromium(III) oxide		1308-38-9	*
Magnesium Oxide		1309-48-4	*
Aluminum Oxide (Non-Fibrous)		1344-28-1	*
Silicon Dioxide, Amorphous		7631-86-9	*
Carbon		1333-86-4	*
Iron Oxide		1309-37-1	*
Calcium Oxide		1305-78-8	*

*Designates that a specific chemical identity and/or percentage of composition has been withheld as a trade secret.
** Linked silica with less than 1 % free silica.

4. First-aid measures

Inhalation
Move to fresh air. Call a physician if symptoms develop or persist.

Skin contact
Wash off with soap and water. Get medical attention if irritation develops and persists.

Eye contact
Rinse with water. Get medical attention if irritation develops and persists.

Ingestion
Unlikely route of exposure. If ingested in sufficient quantity and the victim is conscious, give 1-2 glasses of water. Never give anything by mouth to an unconscious person. Leave the decision to induce vomiting to qualified medical personnel, since particles may be aspirated into the lungs. Seek immediate medical attention.

Most important symptoms/effects, acute and delayed
Direct contact with the eyes may cause temporary irritation. Coughing.

Indication of immediate medical attention and special treatment needed
Provide general supportive measures and treat symptomatically. Keep the victim under observation. Symptoms may be delayed.

General information
If concerned: Get medical advice. Ensure that medical personnel are aware of the material(s) involved and take precautions to protect themselves.

5. Fire-fighting measures

Suitable extinguishing media Use fire-extinguishing media appropriate for surrounding materials.

Unsuitable extinguishing media

Not available.

Specific hazards arising from the chemical

Not available.

Special protective equipment and precautions for firefighters

Wet material should be kept out of eyes and off skin in any fire, and wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear. The material does not give off toxic fumes in a fire unless it is molten.

6. Accidental release measures

Personal precautions, protective equipment, and emergency procedures

Keep unnecessary personnel away. Keep people away from, and upwind of spill/leak. Wear appropriate protective equipment and clothing during clean-up. Use a NIOSH/MSHA-approved respirator if there is a risk of exposure to dust/fume at levels exceeding the exposure limits. Ensure adequate ventilation. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS.

Methods and materials for containment and cleaning up

Stop the flow of material if this is without risk. Collect dust using a vacuum cleaner equipped with a HEPA filter.
Large Spills: Wet down with water and dike for later disposal. Shovel the material into a waste container. Avoid the generation of dust during clean-up. Following product recovery, flush the area with water.
Small Spills: Sweep up or vacuum up spillage and collect it in a suitable container for disposal. For waste disposal, see section 13 of the SDS.

Environmental precautions Avoid discharge into drains, water courses, or onto the ground.

7. Handling and storage

Precautions for safe handling Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Keep the formation of airborne dust to a minimum. Provide appropriate exhaust ventilation at places where dust is formed. Do not breathe dust. Avoid prolonged exposure. Should be handled in closed systems, if possible. Wear appropriate personal protective equipment. Observe good industrial hygiene practices.

Conditions for safe storage, including any incompatibilities

Store locked up. Store in the original tightly closed container. Store away from incompatible materials (see Section 10 of the SDS).

8. Exposure controls/personal protection

Occupational exposure limit

US OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

Components	*Type*	*Value*	*Form*
Chromium (III) oxide (CAS 1308-38-90)	PEL	0.5 mg/m3	
Aluminum Oxide (Non-Fibrous) (CAS 1344-28-1)	PEL	5 mg/m3	Respirable fraction
Magnesium Oxide (CAS 1309-48-4)	PEL	15 mg/m3	Total particulate.
Carbon (CAS 1333-86-4)	PEL	3.5 mg/m3	
Calcium Oxide (CAS 1305-78-8)	PEL	5 mg/m3	

US OSHA Table Z-3 (29 CFR 1910.1000)

Components	*Type*	*Value*	*Form*
Silicon Dioxide, Amorphous (CAS 7631-86-9)	TWA	0.8 mg/m3 20 mppcf	

US ACGIH Threshold Limit Values

Components	*Type*	*Value*	*Form*
Chromium (III) oxide (CAS 1308-38-90)	TWA	2 mg/m3	
Magnesium Oxide (CAS 1309-48-4)	TWA	10 mg/m3	Inhalable fraction
Aluminum Oxide (Non-Fibrous) (CAS1344-28-1)	TWA	1 mg/m3	Respirable fraction
Calcium Oxide (CAS 1305-78-8)	TWA	2 mg/m3	
Carbon (CAS 1333-86-4)	TWA	3 mg/m3	Inhalable fraction

US NIOSH: Pocket Guide to Chemical Hazards

Components	*Type*	*Value*	*Form*
Chromium (III) oxide (CAS 1308-38-90)	TWA	0.5 mg/m3	
Calcium Oxide (CAS 1305-78-8)	TWA	2 mg/m3	
Carbon (CAS 1333-86-4)	TWA	0.1 mg/m3	
Silicon Dioxide, Amorphous	TWA	6 mg/m	Respirable dust.

(CAS 7631-86-9)

Biological limit values	No biological exposure limits were noted for the ingredient(s).
Exposure guidelines	Occupational exposure to nuisance dust (total and respirable) should be monitored and controlled.

Appropriate engineering controls

Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level.

Individual protection measures, such as personal protective equipment

Eye/face protection	Wear safety glasses with side shields (or goggles).
Skin protection	
Hand protection	Wear appropriate chemical-resistant gloves.
Other	Wear suitable protective clothing. Use of an impervious apron is recommended.
Respiratory protection	Use a NIOSH/MSHA-approved respirator if there is a risk of exposure to dust/fume at levels exceeding the exposure limits.
Thermal hazards	Wear appropriate thermal protective clothing, when necessary

General Hygiene Considerations

Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

9. Physical and chemical properties

Appearance	
Physical state	Solid.
Form	Solid Powder.
Color	Not available.
Odor	Not available.
Odor threshold	Not available.
pH	Not available.
Melting point/freezing point	Not available.
Initial boiling point and boiling range	Not available.
Flash point	Not available.
Evaporation rate	Not available.

Flammability (solid, gas)	Not available.
Upper/lower flammability or explosive limits	
Flammability limit - lower (%)	Not available.
Flammability limit - upper (%)	Not available.
Explosive limit - lower (%)	Not available.
Explosive limit - upper (%)	Not available.
Vapor pressure	Not available.
Vapor density	Not available.
Relative density	Not available.
Solubility(ies)	
Solubility (water)	Not available.
Partition coefficient (n-octanol/water)	Not available.
Auto-ignition temperature	Not available.
Decomposition temperature	Not available.
Viscosity	Not available.

10. Stability and reactivity

Reactivity	The product is stable and non-reactive under normal conditions of use, storage, and transport.
Chemical stability	Material is stable under normal conditions.
Possibility of hazardous reactions	No dangerous reaction is known under conditions of normal use.
Conditions to avoid	Contact with incompatible materials.
Incompatible materials	Strong oxidizing agents. Chlorine. Incompatibility is based strictly upon potential theoretical reactions between chemicals and may not be specific to industrial application exposure. Contact your sales representative for clarification.
Hazardous decomposition products	No hazardous decomposition products are known.

11. Toxicological information

Information on likely routes of exposure

Inhalation	Dust may irritate the respiratory system. Prolonged inhalation may be harmful.
Skin contact	Dust or powder may irritate the skin.
Eye contact	Dust may irritate the eyes.
Ingestion	Expected to be a low ingestion hazard.

Symptoms related to the physical, chemical, and toxicological characteristics:

Dust may irritate the respiratory tract, skin, and eyes. Coughing.

Information on toxicological effects

Acute toxicity	Not available.
Skin corrosion/irritation	Prolonged skin contact may cause temporary irritation.
Serious eye damage/eye irritation	Direct contact with the eyes may cause temporary irritation.
Respiratory or skin sensitization	
Respiratory sensitization	Not a respiratory sensitizer.
Skin sensitization	This product is not expected to cause skin sensitization.
Germ cell mutagenicity	No data is available to indicate product, or any components present at greater than 0.1% are mutagenic or genotoxic.

IARC Monographs. Overall Evaluation of Carcinogenicity

Carbon (CAS 1333-86-4)	2B Possibly carcinogenic to humans.
Chromium (III) oxide (CAS 1308-38-9)	3 Not classifiable as to carcinogenicity to humans.
Silicon Dioxide, Amorphous (CAS 7631-86-9)	3 Not classifiable as to carcinogenicity to humans.

US National Toxicology Program (NTP) Report on Carcinogens

Not listed.

US OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not listed.

Reproductive toxicity	This product is not expected to cause reproductive or developmental effects.
Specific target organ toxicity - single exposure	Not classified.
Specific target organ toxicity - repeated exposure	Not classified.
Aspiration hazard	Not an aspiration hazard.
Chronic effects	Prolonged inhalation may be harmful. Prolonged exposure may cause chronic effects.

12. Ecological information

Ecotoxicity	The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.
Persistence and degradability	No data is available on the degradability of this product.
Bio-accumulative potential	No data available.
Mobility in soil	No data available.
Other adverse effects	No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

13. Disposal considerations

Disposal instructions	This product, in its present state, when discarded or disposed of, is not hazardous waste according to Federal

regulations (40 CFR 261.4 (b)(4)). Under RCRA, it is the responsibility of the user of the product to determine, at the time of disposal, whether the product meets RCRA criteria for hazardous waste.

Hazardous waste code Since this product is used in several industries, no Waste Code can be provided by the supplier. The Waste Code should be determined in arrangement with your waste disposal partner or the responsible authority.

Waste from residues / unused products

Not available.

Contaminated packaging Not available.

14. Transport information

DOT

Not regulated as dangerous goods.

IATA

Not regulated as dangerous goods.

IMDG

Not regulated as dangerous goods.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable.

15. Regulatory information

US federal regulations This product is not known to be a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200. One or more components are not listed on TSCA. All chemical substances in this product are listed on the TSCA chemical substance inventory where required.

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not regulated.

CERCLA Hazardous Substance List (40 CFR 302.4)

Not listed.

SARA 304 Emergency release notification

Not regulated.

US OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not listed.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories Immediate Hazard - No
Delayed Hazard - Yes
Fire Hazard - No
Pressure Hazard - No
Reactivity Hazard – No

SARA 302 Extremely hazardous substance

Not listed.

SARA 311/312 Hazardous Chemical

Not listed.

SARA 313 (TRI reporting)

Chemical Name	*CAS number*	*% by wt.*

Chromium (III) oxide	1308-38-9 40	*
Aluminum Oxide (Non-Fibrous)	1344-28-1	*

Other federal regulations

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

Chromium (III) oxide (CAS 1308-38-9)

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Not regulated.

Safe Drinking Water Act (SDWA)

Not regulated.

US state regulations

US California Controlled Substances. CA Department of Justice (California Health and Safety Code Section 11100)

Not listed.

US Massachusetts RTK - Substance List

Aluminum Oxide (Non-Fibrous) (CAS 1344-28-1)
Magnesium Oxide (CAS 1309-48-4)
Calcium Oxide (CAS 1305-78-8)
Carbon (CAS 1333-86-4)
Chromium (III) oxide (CAS 1308-38-9)

US New Jersey Worker and Community Right-to-Know Act

Aluminum Oxide (Non-Fibrous) (CAS 1344-28-1)
Magnesium Oxide (CAS 1309-48-4)
Calcium Oxide (CAS 1305-78-8)
Carbon (CAS 1333-86-4)
Chromium (III) oxide (CAS 1308-38-9)

US Pennsylvania Worker and Community Right-to-Know Law

Aluminum Oxide (Non-Fibrous) (CAS 1344-28-1)
Magnesium Oxide (CAS 1309-48-4)
Calcium Oxide (CAS 1305-78-8)
Carbon (CAS 1333-86-4)

US Rhode Island RTK Aluminum Oxide (Non-Fibrous) (CAS 1344-28-1)

US California Proposition 65

WARNING: This product contains a chemical known to the State of California to cause cancer.

US California Proposition 65 - CRT: Listed date/Carcinogenic substance

Carbon (CAS 1333-86-4) Listed: February 21, 2003

16. Other information, including date of preparation or last revision

This information is supplied to be informative and to alert the user of the material. The ultimate compliance with federal, state, and/or local regulations concerning the use of this material, or compliance with respect to product liability, rests solely upon the purchaser thereof.

Prepared by: FRC Global
Date: October 2020

DISCLAIMER: Reasonable care has been taken in the preparation of the information provided and believed to be correct as of the issue date. However, FRC Global makes no representation or warranties and assumes no responsibility as to the completeness and accuracy thereof. Users must make their own determination as to the suitability of the product for their purpose before use. FRC Global will not be responsible for any damages of any nature directly or indirectly whatsoever resulting from the use of, reliance upon, or misuse of the information contained herein.

End of Safety Data Sheet