



SAFETY DATA SHEET

This safety data sheet was created pursuant to the requirements of: United States of America

Revision date 07-Dec-2023

Revision Number 1

1. Identification

Product identifier

Product Name Lattice® NT-020

Product Code(s) NT020-INDR050I

Recommended use of the chemical and restrictions on use

Recommended use Pharmaceutical

Restrictions on use None under normal use conditions

Details of the supplier of the safety data sheet

Supplier Address

International Flavors and Fragrances, Inc.
974 Centre Road
Wilmington, DE 19805
+ 1 800 255 6837 (General Information)

E-mail address

sds.genencor@iff.com

Emergency telephone number

Local (Washington DC): +1 703-741-5970
Toll Free: 1-800-424-9300

2. Hazard(s) identification

Classification

Combustible dust	Yes
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Label elements

Signal word: Warning

May form combustible dust concentrations in air

Hazards not otherwise classified (HNOC)

No hazards not otherwise classified were identified.

Other information

No information available.

3. Composition/information on ingredients

Substance

Chemical name	CAS No.	Weight-%
Microcrystalline Cellulose	9004-34-6	95 - 100

*The exact percentage (concentration) of composition has been withheld as a trade secret.

4. First-aid measures

Description of first aid measures

General advice	When in doubt or if symptoms are observed, get medical advice.
Inhalation	IF INHALED: Remove person to fresh air and keep comfortable for breathing. If experiencing respiratory symptoms: Call a POISON CENTER or doctor.
Eye contact	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.
Skin contact	IF ON SKIN: Wash with plenty of water and soap. If skin irritation occurs: Get medical advice/attention.
Ingestion	IF SWALLOWED: Never give anything by mouth to an unconscious person. Drink plenty of water. Get medical attention if symptoms occur.

Most important symptoms and effects, both acute and delayed

Symptoms	Get medical attention if irritation or other symptoms occur.
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Indication of any immediate medical attention and special treatment needed

Note to physicians	Treat symptomatically.
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5. Fire-fighting measures

Suitable Extinguishing Media	Foam. Dry powder. Water spray. Carbon dioxide (CO ₂).
Unsuitable extinguishing media	Keep product and empty container away from heat and sources of ignition. Do not use water jetstream.
Specific hazards arising from the chemical	Fine dust dispersed in air, in sufficient concentrations, and in the presence of an ignition source is a potential dust explosion hazard.
Hazardous combustion products	Smoke production.
Explosion data	
Sensitivity to mechanical impact	No.
Sensitivity to static discharge	Yes.
Special protective equipment for fire-fighters	Positive pressure self-contained breathing apparatus (SCBA) and structural firefighters' protective clothing will provide adequate protection.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

Personal precautions Dust deposits should not be allowed to accumulate on surfaces, as these may form an explosive mixture if they are released into the atmosphere in sufficient concentration. Avoid dispersal of dust in the air (i.e., clearing dust surfaces with compressed air). Use personal protection recommended in Section 8. Sweep up to prevent slipping hazard.

For emergency responders Use personal protection recommended in Section 8.

Methods and material for containment and cleaning up

Methods for containment Sweep up and shovel into suitable containers for disposal. Avoid dust formation. Dispose of in accordance with local regulations.

Methods for cleaning up Use industrial vacuum cleaners approved for combustible dust and area electrical classification.

Prevention of secondary hazards Clean contaminated objects and areas thoroughly observing environmental regulations.

Reference to other sections See section 8 for more information.

7. Handling and storage

Precautions for safe handling

Advice on safe handling Avoid generation of dust and aerosols. Avoid contact with eyes, skin and clothing. Minimize dust generation and accumulation. Combustible dust clouds may be created where operations produce fine material (dust). Avoid significant deposits of material, especially on horizontal surfaces, which may become airborne and form combustible dust clouds and may contribute to secondary explosions. Handling and processing operations should be conducted in accordance with 'best practices' (e.g. NFPA- 654).

Conditions for safe storage, including any incompatibilities

Storage Conditions Keep/store only in original container. Keep container tightly closed in a dry and well-ventilated place.

8. Exposure controls/personal protection

Control parameters

Exposure Limits Based on data available for ingredients

Chemical name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Microcrystalline Cellulose 9004-34-6	-	TWA: 15 mg/m ³ total dust TWA: 5 mg/m ³ respirable fraction (vacated) TWA: 15 mg/m ³ total dust (vacated) TWA: 5 mg/m ³ respirable fraction (vacated) STEL: 10 mg/m ³	TWA: 10 mg/m ³ total dust TWA: 5 mg/m ³ respirable dust

Appropriate engineering controls

Engineering controls	Ensure adequate ventilation. Avoid generation of dust and aerosols.
<u>Individual protection measures, such as personal protective equipment</u>	
Eye/face protection	Wear safety glasses with side shields (or goggles).
Hand protection	Wear protective gloves.
Skin and body protection	Wear protective gloves and protective clothing.
Respiratory protection	If exposure limits are likely to be exceeded or if irritation or other symptoms are experienced, NIOSH/MSHA or EN 136 approved respiratory protection should be worn.
General hygiene considerations	Handle in accordance with good industrial hygiene and safety practice. Regular cleaning of equipment, work area and clothing is recommended. Avoid contact with eyes, skin and clothing. Wear suitable gloves and eye/face protection.

9. Physical and chemical properties

Information on basic physical and chemical properties

Appearance	Powder
Physical state	Solid
Color	White to off-white
Odor	Odorless
Odor threshold	No information available

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
pH	5.0 - 7.0	None known
Melting point / freezing point	No data available	None known
Initial boiling point and boiling range	No data available	None known
Flash point	No data available	None known
Evaporation rate	No data available	None known
Flammability (solid, gas)	No data available	None known
Flammability Limit in Air		None known
Upper flammability or explosive limits	No data available	
Lower flammability or explosive limits	No data available	
Vapor pressure	No data available	None known
Relative vapor density	No data available	None known
Relative density	No data available	None known
Water solubility	Insoluble in water	None known
Solubility(ies)	No data available	None known
Partition coefficient	No data available	None known
Autoignition temperature	No data available	None known
Decomposition temperature	No data available	None known
Kinematic viscosity	No data available	None known
Dynamic viscosity	No data available	None known

Other information

Explosive properties	No data available
Oxidizing properties	No information available

10. Stability and reactivity

Reactivity	Not expected.
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Chemical stability	Stable under normal conditions.
Possibility of hazardous reactions	None under normal processing.
Hazardous polymerization	Hazardous polymerization does not occur.
Conditions to avoid	Heat, flames and sparks. May form combustible dust concentrations in air.
Incompatible materials	Keep away from heat, flames and sparks.
Hazardous decomposition products	No hazardous decomposition products known.

11. Toxicological information

Information on likely routes of exposure

Product Information

Acute toxicity	
Inhalation	No information or data specific to the product on this toxicological (health) effect is available.
Eye contact	No information or data specific to the product on this toxicological (health) effect is available.
Skin contact	No information or data specific to the product on this toxicological (health) effect is available.
Ingestion	No information or data specific to the product on this toxicological (health) effect is available.

Symptoms related to the physical, chemical and toxicological characteristics

Symptoms	Get medical attention if irritation or other symptoms occur.
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Delayed and immediate effects as well as chronic effects from short and long-term exposure

Respiratory or skin sensitization	No information available.
Germ cell mutagenicity	No information available.
Carcinogenicity	No information available.
Reproductive toxicity	No information available.
STOT - single exposure	No information available.
STOT - repeated exposure	No information available.
Aspiration hazard	No information available.

Numerical measures of toxicity

<u>Component Information</u>	Based on data available for ingredients
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Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Microcrystalline Cellulose 9004-34-6	> 5 g/kg (Rat)	> 2 g/kg (Rabbit) > 2000 mg/kg (Rabbit)	> 5800 mg/m ³ (Rat) 4 h

Microcrystalline Cellulose 9004-34-6

Eye irritation	May cause irritation
Skin irritation	May cause skin irritation
Respiratory irritation	Not expected
Sensitization	Not expected
Reproductive effects	Not expected
Mutagenic effects	Not expected
Systemic Toxicity	Not expected
Carcinogenicity	Not expected
Teratogenicity	Not expected

Chemical name	ACGIH	IARC	NTP	OSHA
Microcrystalline Cellulose 9004-34-6	-	-	-	-

12. Ecological information

Ecotoxicity Based on data available for ingredients

Persistence and degradability Based on data available for ingredients.

Bioaccumulative potential Based on data available for ingredients.

Mobility in soil No information available.

Other adverse effects No information available.

13. Disposal considerations

Waste from residues/unused products Dispose of wastes in an approved waste disposal facility. Dispose of contents and container in accordance with local, regional, national, and international regulations as applicable.

Contaminated packaging Dispose of empty containers and wastes safely. Dispose of waste product or used containers according to local regulations.

14. Transport information

DOT Not regulated

IATA Not regulated

IMDG Not regulated

15. Regulatory information

International Inventories Based on data available for ingredients

Chemical name	AICS	DSL/NDL	EINECS/ELINCS	ENCS	IECSC	KECL	PICCS
Microcrystalline Cellulose 9004-34-6	X	X	X	-	X	X	X

US Federal Regulations

TSCA Contact supplier for inventory compliance status.

Chemical name	CAS No.	US TSCA Inventory listing	US TSCA active/inactive designation
Microcrystalline Cellulose	9004-34-6	Present	Active

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

SARA 311/312 Hazard Categories

Should this product meet EPCRA 311/312 Tier reporting criteria at 40 CFR 370, refer to Section 2 of this SDS for appropriate classifications.

CWA (Clean Water Act)

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).

CERCLA

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material.

US State Regulations**California Proposition 65**

This product does not contain any Proposition 65 chemicals.

Chemical name	California Proposition 65
Microcrystalline Cellulose 9004-34-6	-

U.S. State Right-to-Know Regulations

Based on data available for ingredients

Chemical name	New Jersey	Massachusetts	Pennsylvania
Microcrystalline Cellulose 9004-34-6	-	-	-

16. Other information**Legend:**

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

DSL/NDL - Canadian Domestic Substances List/Non-Domestic Substances List

EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances

ENCS - Japan Existing and New Chemical Substances

IECSC - China Inventory of Existing Chemical Substances

KECL - Korean Existing and Evaluated Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances

AICS - Australian Inventory of Chemical Substances

Revision date 07-Dec-2023

Revision Number 1

Revision Note ***Indicates updated data since last publication.

Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

End of Safety Data Sheet