JNC CORPORATION

SAFETY DATA SHEET

Issuing Date 26-Apr-2018 Revision Date 29-Aug-2019 Revision Number 3

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

Product identifier

Product Name Cellufine MAX DexS-HbP/ MAX DexS-VirS

Other means of identification

Product Code(s) PPN-FM-00052USA
Safety data sheet number CPS-F-0066M-USA
Recommended use of the chemical and restrictions on use

Recommended Use Liquid Chromatography Media

Uses advised against Please do not use for other than recommended use.

Details of the supplier of the safety data sheet

Manufacturer Address

JNC Corporation,

Shin Otemachi Bldg.,2-1,Otemachi 2-Chome,Chiyoda-ku,Tokyo 100-8105 Japan

Tel:+81-3-3243-6150 Fax:+81-3243-6219

Emergency telephone number

Emergency Telephone +81-3-3243-6150

2. HAZARDS IDENTIFICATION

Classification

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Flammable liquids Category 3

Hazards not otherwise classified (HNOC)

Not applicable

Label elements

Hazard statements

Flammable liquid and vapor



Appearance White-slightly grayish wet Physical state Liquid Odor No information available

beads

Precautionary Statements - Prevention

Obtain special instructions before use

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking

Use dry sand, dry chemical or alcohol-resistant foam to extinguish

Other Information

Not applicable

3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance

Not applicable.

<u>Mixture</u>

| Chemical name | CAS No. | Weight-% | Trade secret |
|---------------------------------------|--------------|-----------|--------------|
| Cellufine MAX DexS-HbP/ MAX DexS-VirS | 2222684-05-9 | 1-10 | * |
| water | 7732-18-5 | 71.5-81.9 | * |
| Ethanol | 64-17-5 | 14.5-19.2 | * |
| Disodium Hydrogenphosphate | 7558-79-4 | 1.0-1.1 | * |
| Sodium Dihydrogenphosphate Dihydrate | 13472-35-0 | 0.06-0.07 | * |

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4. FIRST AID MEASURES

Description of first aid measures

IF exposed or concerned: Get medical advice/attention. Show this safety data sheet General advice

to the doctor in attendance.

Remove to fresh air. IF exposed or concerned: Get medical advice/attention. Inhalation Eye contact Rinse immediately with plenty of water, also under the eyelids, for at least 15

minutes. Keep eye wide open while rinsing. Do not rub affected area.

Skin contact Wash off immediately with soap and plenty of water while removing all contaminated

clothes and shoes.

Do NOT induce vomiting. Clean mouth with water and drink afterwards plenty of Ingestion

water. Never give anything by mouth to an unconscious person. Call a physician. Self-protection of the first aider Remove all sources of ignition. Ensure that medical personnel are aware of the

material(s) involved, take precautions to protect themselves and prevent spread of contamination. Use personal protective equipment as required. See section 8 for

more information.

Most important symptoms and effects, both acute and delayed **Symptoms** No information available.

Indication of any immediate medical attention and special treatment needed

Note to physicians Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media Dry chemical. Carbon dioxide (CO2). Water spray. Alcohol resistant foam.

Unsuitable extinguishing media Do not scatter spilled material with high pressure water streams. Do not use straight

streams. CAUTION: Use of water spray when fighting fire may be inefficient. Specific hazards arising from the chemical Risk of ignition. Keep product and empty container away from heat and sources of

ignition. In the event of fire, cool tanks with water spray. Fire residues and

contaminated fire extinguishing water must be disposed of in accordance with local

regulations.

Explosion data Sensitivity to Mechanical Impact

Sensitivity to Static Discharge

Special protective equipment for fire-

fighters

No data available.

May be ignited by heat, sparks or flames.

Firefighters should wear self-contained breathing apparatus and full firefighting

turnout gear. Use personal protection equipment.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal precautions Evacuate personnel to safe areas. Use personal protective equipment as required.

See section 8 for more information. Avoid contact with skin, eyes or clothing. Ensure adequate ventilation. Keep people away from and upwind of spill/leak. ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area). Pay attention to flashback. Take precautionary measures against static discharges. All equipment used when handling the product must be grounded. Do not touch or walk

through spilled material.

Other Information Ventilate the area. Refer to protective measures listed in Sections 7 and 8.

Environmental precautions

Prevention of secondary hazards

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Environmental precautions Refer to protective measures listed in Sections 7 and 8. Prevent further leakage or

spillage if safe to do so. Prevent product from entering drains.

Methods and material for containment and cleaning up

Methods for containment Stop leak if you can do it without risk. Do not touch or walk through spilled material.

A vapor suppressing foam may be used to reduce vapors. Dike far ahead of spill to collect runoff water. Keep out of drains, sewers, ditches and waterways. Absorb with earth, sand or other non-combustible material and transfer to containers for later

disposal.

Take precautionary measures against static discharges. Dam up. Soak up with inert Methods for cleaning up

absorbent material. Pick up and transfer to properly labeled containers. Clean contaminated objects and areas thoroughly observing environmental

regulations.

7. HANDLING AND STORAGE

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Precautions for safe handling

Advice on safe handling Use personal protection equipment. Avoid breathing vapors or mists. Keep away

from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Use grounding and bonding connection when transferring this material to prevent static discharge, fire or explosion. Use with local exhaust ventilation. Use spark-proof tools and explosion-proof equipment. Keep in an area equipped with sprinklers. Use according to package label instructions. Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin, eyes or clothing.

Conditions for safe storage, including any incompatibilities

Storage Conditions Keep containers tightly closed in a dry, cool and well-ventilated place. Keep away

from heat, sparks, flame and other sources of ignition (i.e., pilot lights, electric motors and static electricity). Keep in properly labeled containers. Do not store near combustible materials. Keep in an area equipped with sprinklers. Store in accordance with the particular national regulations. Store in accordance with local regulations.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure LimitsThe following ingredients are the only ingredients of the product above the cut-off level (or level that contributes to the hazard classification of the mixture) which have

an exposure limit applicable in the region for which this safety data sheet is intended or other recommended limit. At this time, the other relevant constituents have no

known exposure limits from the sources listed here.

| Chemical name | ACGIH TLV | OSHA PEL | NIOSH IDLH |
|---------------|----------------|---------------------------------------|-----------------------------|
| Ethanol | STEL: 1000 ppm | TWA: 1000 ppm | IDLH: 3300 ppm |
| | | TWA: 1900 mg/m ³ | TWA: 1000 ppm |
| | | (vacated) TWA: 1000 ppm | TWA: 1900 mg/m ³ |
| | | (vacated) TWA: 1900 mg/m ³ | - |

Appropriate engineering controls

Engineering controls Showers

Eyewash stations Ventilation systems.

Individual protection measures, such as personal protective equipment

Eye/face protection Tight sealing safety goggles. Wear safety glasses with side shields (or goggles).

Hand protection Impervious gloves. Wear suitable protective gloves.

Skin and body protection Wear suitable protective clothing. Long sleeved clothing. Chemical resistant apron.

Antistatic boots.

Respiratory protection No protective equipment is needed under normal use conditions. If exposure limits

are exceeded or irritation is experienced, ventilation and evacuation may be

required.

General hygiene considerations

Do not eat, drink or smoke when using this product. Contaminated work clothing

should not be allowed out of the workplace. Regular cleaning of equipment, work area and clothing is recommended. Wash hands before breaks and immediately

after handling the product.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical state Liquid

Appearance White-slightly grayish wet beads

Color colorless

Odor No information available Odor threshold No information available

PropertyValuesRemarks• MethodpHNo data available

Melting point / freezing point

Boiling point / boiling range

Flash point

No data available
No data available
35 °C / 95 °F

Flash point 35 °C / 95 °F Tag Closed Cup
Evaporation rate No data available

No data available

Flammability (solid, gas)
Flammability Limit in Air

Upper flammability limit: No data available

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Lower flammability limit: No data available Vapor pressure No data available Vapor density No data available Relative density No data available Water solubility Insoluble in water Solubility in other solvents No data available **Partition coefficient** No data available **Autoignition temperature** No data available **Decomposition temperature** No data available Kinematic viscosity No data available Dynamic viscosity No data available

Explosive propertiesNo information available **Oxidizing properties**No information available

Other Information

Softening point
Molecular weight
VOC Content (%)
Liquid Density
No information available

10. STABILITY AND REACTIVITY

ReactivityChemical stability
No information available.
Stable under normal conditions.

Possibility of hazardous reactions It is stable under general handling and storage conditions (40 ° C or less, under

atmospheric pressure). Heat, flames and sparks. Strong oxidizing agents.

Incompatible materials

Hazardous decomposition products

Strong oxidizing agents.

None under normal use conditions. When incomplete combustion occurs, carbon

monoxide is generated.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Product Information

Conditions to avoid

InhalationSpecific test data for the substance or mixture is not available.Eye contactSpecific test data for the substance or mixture is not available.Skin contactSpecific test data for the substance or mixture is not available.IngestionSpecific test data for the substance or mixture is not available.

Symptoms related to the physical, chemical and toxicological characteristics

Symptoms No information available.

Numerical measures of toxicity

Acute toxicity

The following values are calculated based on chapter 3.1 of the GHS document ...

Unknown acute toxicity No information available

Component Information

| Chemical name | Oral LD50 | Dermal LD50 | Inhalation LC50 |
|----------------------------|--------------------|-------------|------------------------|
| water | > 90 mL/kg (Rat) | - | - |
| Ethanol | = 7060 mg/kg (Rat) | - | = 124.7 mg/L (Rat) 4 h |
| Disodium Hydrogenphosphate | = 17 g/kg (Rat) | - | - |

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Skin corrosion/irritation
Serious eye damage/eye irritation
Respiratory or skin sensitization
Germ cell mutagenicity

No information available.
No information available.
No information available.

Carcinogenicity Classification based on data available for ingredients.

The table below indicates whether each agency has listed any ingredient as a carcinogen.

| Chemical name | ACGIH | IARC | NTP | OSHA |
|---------------|-------|---------|-------|------|
| Ethanol | A3 | Group 1 | Known | X |

Legend

ACGIH (American Conference of Governmental Industrial Hygienists): A3 - Animal Carcinogen IARC (International Agency for Research on Cancer): Group 1 - Carcinogenic to Humans

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Daphnia magna)

NTP (National Toxicology Program): Known - Known Carcinogen

OSHA (Occupational Safety and Health Administration of the US Department of Labor): X - Present

Reproductive toxicity
STOT - single exposure
STOT - repeated exposure
No information available.
No information available.

Target organ effects liver, Respiratory system, Eyes, Skin, Central nervous system, blood, Reproductive

System.

Aspiration hazard No information available.

12. ECOLOGICAL INFORMATION

Ecotoxicity Chemical name Algae/aquatic plants Fish Toxicity to Crustacea microorganisms Ethanol LC50: 12.0 - 16.0mL/L 96h, Oncorhynchus LC50: 9268 - 14221mg/L mykiss) (48h, Daphnia magna) _C50: >100mg/L (96h, EC50: =2mg/L (48h, Pimephales promelas) Daphnia magna) LC50: 13400 -EC50: =10800mg/L (24h,

15100mg/L (96h,

Pimephales promelas)

Persistence and degradability

Bioaccumulation

No information available.

There is no data for this product.

Component Information

| Chemical name | Partition coefficient |
|---------------|-----------------------|
| Ethanol | -0.32 |

Other adverse effects No information available.

13. DISPOSAL CONSIDERATIONS

Waste treatment methods

Waste from residues/unused products

Contaminated packaging

ADR

Should not be released into the environment. Dispose of in accordance with local regulations. Dispose of waste in accordance with environmental legislation. Empty remaining contents. Empty containers pose a potential fire and explosion hazard. Do not cut, puncture of weld containers. Dispose of contents/containers in accordance with local regulations. D001.

US EPA Waste Number

California Hazardous Waste Status

This product contains one or more substances that are listed with the State of

California as a hazardous waste.

| Chemical name | California Hazardous Waste Status |
|---------------|-----------------------------------|
| Ethanol | Toxic : Ignitable |

14. TRANSPORT INFORMATION

Not Classified. An aqueous solution containing not more than 24% alcohol by volume is not subject to the requirements of RID/ADR. (SP No. 144) Not regulated
 Not applicable (In accordance with IATA Special Regulation A58, aqueous solutions

containing less than 24% by volume of alcohol are not classified as dangerous

products) Not regulated

IMDG Not applicable (In accordance with IMDG special provision SP 144, aqueous

solutions containing less than 24% by volume of alcohol are not classified as

dangerous products) Not regulated

RID Not Classified. An aqueous solution containing not more than 24% alcohol by volume is not subject to the requirements of RID/ADR. (SP No. 144) Not regulated

Not applicable (Alcohol content of 24% by volume or less is not classified as

dangerous) Not regulated

.DN Not regulated

Special precautions Secure the container when transporting it. Packing appropriate cushioning material

between containers to prevent containers in transport from hitting or breaking each

other.

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15. REGULATORY INFORMATION

International Inventories

TSCA Does not comply DSL/NDSL Does not comply **EINECS/ELINCS** Does not comply **ENCS** Does not comply **IECSC** Not included **KECL** Does not comply **PICCS** Does not comply **AICS** Does not comply

Legend:

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

DSL/NDSL - 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

US Federal Regulations

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 Under the amended regulations at 40 CFR 370, EPCRA 311/312 Tier II reporting for the 2017 calendar year will need to be consistent with updated hazard classifications

CWA (Clean Water Act)

This product contains the following substances which are regulated pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).

| and 10 01 11 122.12). | | | | |
|-----------------------|------------------|------------------------|---------------------------|------------|
| Chemical name | CWA - Reportable | CWA - Toxic Pollutants | CWA - Priority Pollutants | |
| | Quantities | | | Substances |
| Disodium | 5000 lb | - | - | X |
| Hydrogenphosphate | | | | |

CERCLA

This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302).

| Chemical name | Hazardous Substances RQs | Extremely Hazardous Substances RQs |
|----------------------------|--------------------------|------------------------------------|
| Disodium Hydrogenphosphate | 5000 lb | - |

US State Regulations

California Proposition 65

This product contains the following Proposition 65 chemicals.

Signal word WARNING!



This product can expose you to chemicals including those listed below, which is [are] known to the State of California to cause cancer, birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov

| Chemical name | California Proposition 65 |
|---------------|----------------------------|
| Ethanol | Carcinogen : Developmental |

U.S. State Right-to-Know Regulations

US State Regulations

| Chemical name | New Jersey | Massachusetts | Pennsylvania |
|----------------------------|------------|---------------|--------------|
| water | - | - | X |
| Ethanol | Χ | X | X |
| Disodium Hydrogenphosphate | Χ | X | X |

U.S. EPA Label Information

EPA Pesticide Registration Number Not applicable

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16. OTHER INFORMATION, INCLUDING DATE OF PREPARATION OF THE LAST REVISION

Health hazards 0 Flammability 3 Instability 0 Physical and chemical <u>NFPA</u>

properties **HMIS Health hazards** Physical hazards 0 Personal protection X

* 2 Flammann, * = Chronic Health Hazard Chronic Hazard Star Legend

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Revision Note 3

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.

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