Printing date 02/13/2024 Reviewed on 05/18/2023

1 Identification

- · Product identifier
- · Trade name: Glucose, D-[6-3H(N)]-, HPLC Purified
- · Product number: NET100C000MC, NET100C001MC, NET100C005MC
- · Application of the substance / the mixture Laboratory chemicals
- Details of the supplier of the safety data sheet
- · Manufacturer/Supplier:

Revvity, Inc 549 Albany Street

Boston, MA 02118

· Information department:

US Technical Support

800-762-4000

· Emergency telephone number:

If inside USA, call CHEMTREC at 1-800-424-9300

If outside USA, call CHEMTREC at 1-703-527-3887

2 Hazard(s) identification

· Classification of the substance or mixture

Flammable Liquids 2 H225 Highly flammable liquid and vapor.

- · Additional information: For the wording of the listed H phrases refer to section 16.
- · Label elements
- · GHS label elements The product is classified and labeled according to the Globally Harmonized System (GHS).
- · Hazard pictograms



- · Signal word Danger
- · Hazard statements

Highly flammable liquid and vapor.

· Precautionary statements

Keep away from heat/sparks/open flames/hot surfaces. - No smoking.

Ground/bond container and receiving equipment.

Use explosion-proof electrical/ventilating/lighting/equipment.

Wear protective gloves/protective clothing/eye protection/face protection.

If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.

 $Dispose\ of\ contents/container\ in\ accordance\ with\ local/regional/national/international\ regulations.$

- · Classification system:
- · NFPA ratings (scale 0 4)



— ı

Printing date 02/13/2024 Reviewed on 05/18/2023

Trade name: Glucose, D-[6-3H(N)]-, HPLC Purified

(Contd. of page 1)

3 Composition/information on ingredients

- · Chemical characterization: Mixtures
- · **Description:** Mixture of the substances listed below with nonhazardous additions.
- · Dangerous components:

64-17-5 ethanol

75-100%

4 First-aid measures

- · Description of first aid measures
- General information: Immediately remove any clothing soiled by the product.
- · After inhalation: Supply fresh air; consult doctor in case of complaints.
- · After skin contact: Immediately rinse with water.
- · After eye contact: Rinse opened eye for several minutes under running water.
- · After swallowing: If symptoms persist consult doctor.
- · Information for doctor:
- · Most important symptoms and effects, both acute and delayed No further relevant information available.
- Indication of any immediate medical attention and special treatment needed

No further relevant information available.

5 Fire-fighting measures

- · Extinguishing media
- Suitable extinguishing agents:

CO2, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

- · For safety reasons unsuitable extinguishing agents: Water with full jet
- · Special hazards arising from the substance or mixture No further relevant information available.
- Advice for firefighters
- · Protective equipment: Wear self-contained respiratory protective device.

6 Accidental release measures

· Personal precautions, protective equipment and emergency procedures

Wear protective equipment. Keep unprotected persons away.

- · Environmental precautions: Do not allow to enter sewers/surface or ground water.
- · Methods and material for containment and cleaning up:

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

Dispose contaminated material as waste according to section 13.

Ensure adequate ventilation.

· Reference to other sections

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

· Protective Action Criteria for Chemicals

| · PAC-1: | |
|-----------------|--------------------|
| 64-17-5 ethanol | 1,800 ppm |
| · PAC-2: | |
| 64-17-5 ethanol | 3300* ppm |
| • | (Contd. on page 3) |

- US

Printing date 02/13/2024 Reviewed on 05/18/2023

Trade name: Glucose, D-[6-3H(N)]-, HPLC Purified

(Contd. of page 2)

- PAC-3:

64-17-5 | ethanol | 15000* ppm

7 Handling and storage

- · Handling:
- Precautions for safe handling

Store in cool, dry place in tightly closed receptacles.

No special precautions are necessary if used correctly.

· Information about protection against explosions and fires:

Keep ignition sources away - Do not smoke.

Protect against electrostatic charges.

- · Conditions for safe storage, including any incompatibilities
- · Storage:
- · Requirements to be met by storerooms and containers: Store in a cool location.
- · Information about storage in one common storage facility: Not required.
- · Further information about storage conditions:

Keep receptacle tightly sealed.

Store in cool, dry conditions in well sealed receptacles.

- · Storage class: 3
- · Specific end use(s) No further relevant information available.

8 Exposure controls/personal protection

- · Additional information about design of technical systems: No further data; see section 7.
- · Control parameters

| · Com | · Components with limit values that require monitoring at the workplace: | | | | |
|-------|--|--|--|--|--|
| 64-1 | 64-17-5 ethanol (75-100%) | | | | |
| PEL | Long-term value: 1900 mg/m³, 1000 ppm | | | | |
| REL | Long-term value: 1900 mg/m³, 1000 ppm | | | | |
| TLV | Short-term value: 1000 ppm | | | | |
| | A3 | | | | |

- · Exposure controls
- · Personal protective equipment:
- · General protective and hygienic measures:

Immediately remove all soiled and contaminated clothing.

Wash hands before breaks and at the end of work.

- · Respiratory protection: Suitable respiratory protective device recommended.
- · Protection of hands:



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation. Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

· Material of gloves

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

(Contd. on page 4)

Reviewed on 05/18/2023 Printing date 02/13/2024

Trade name: Glucose, D-[6-3H(N)]-, HPLC Purified

· Penetration time of glove material

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be

(Contd. of page 3)

observed. · Eye protection:



Tightly sealed goggles

| 9 Physical | and | che | emical | prope | erties |
|------------|-----|-----|--------|-------|--------|
| | | | | | |
| | | | | | |

| · Information on ba | sic physical and chemical properties |
|---------------------|--------------------------------------|
| · General Informati | on |
| <u> </u> | |

Appearance:

Form: Fluid

Color: According to product specification

Odor: Characteristic · Odor threshold: Not determined.

N/A · pH-value:

· Change in condition

Melting point/Melting range: Undetermined. Boiling point/Boiling range: 78 °C (172.4 °F)

· Flash point: 13 °C (55.4 °F)

Flammability (solid, gaseous): Highly flammable.

425 °C (797 °F) · Auto igniting: Not determined.

· Decomposition temperature: Product is not selfigniting. Ignition temperature:

Product is not explosive. However, formation of explosive air/vapor Danger of explosion:

mixtures are possible.

· Explosion limits:

Lower: 3.5 Vol % 15 Vol % Upper:

· Vapor pressure at 20 °C (68 °F): 59 hPa (44.3 mm Hg)

· Density: Not determined. · Relative density Not determined. · Vapor density Not determined. · Evaporation rate Not determined.

· Solubility in / Miscibility with

Not miscible or difficult to mix.

· Partition coefficient (n-octanol/water): Not determined.

· Viscosity:

Dvnamic: Not determined. Kinematic: Not determined.

(Contd. on page 5)

Printing date 02/13/2024 Reviewed on 05/18/2023

Trade name: Glucose, D-[6-3H(N)]-, HPLC Purified

Solvent content:
Organic solvents:
Water:
12.3 %
VOC content:
87.60 %

No further relevant information available.

10 Stability and reactivity

- · Reactivity No further relevant information available.
- · Chemical stability
- Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.
- · Possibility of hazardous reactions No dangerous reactions known.
- · Conditions to avoid No further relevant information available.
- · Incompatible materials: No further relevant information available.
- · Hazardous decomposition products: No dangerous decomposition products known.

11 Toxicological information

- · Information on toxicological effects
- · Acute toxicity:
- · Primary irritant effect:
- · on the skin: No irritant effect.
- · on the eye: No irritating effect.
- · Sensitization: No sensitizing effects known.
- · Additional toxicological information:
- · Carcinogenic categories
- · IARC (International Agency for Research on Cancer)

None of the ingredients is listed.

· NTP (National Toxicology Program)

None of the ingredients is listed.

· OSHA-Ca (Occupational Safety & Health Administration)

None of the ingredients is listed.

12 Ecological information

- · Toxicity
- · Aquatic toxicity: No further relevant information available.
- · Persistence and degradability No further relevant information available.
- · Behavior in environmental systems:
- · Bioaccumulative potential No further relevant information available.
- · *Mobility in soil* No further relevant information available.
- · Ecotoxical effects: N/A
- · Other information: N/A
- · Results of PBT and vPvB assessment
- · **PBT:** Not applicable.
- · vPvB: Not applicable.

(Contd. on page 6)

Printing date 02/13/2024 Reviewed on 05/18/2023

Trade name: Glucose, D-[6-3H(N)]-, HPLC Purified

· Other adverse effects No further relevant information available.

(Contd. of page 5)

13 Disposal considerations

- · Waste treatment methods
- · Recommendation:

Must not be disposed of together with household garbage. Do not allow product to reach sewage system. Must be specially treated adhering to official regulations.

- · Uncleaned packagings:
- · Recommendation: Disposal must be made according to official regulations.

| Transport information | |
|--|---|
| UN-Number ADR, IMDG, IATA | UN1170 |
| UN proper shipping name ADR IMDG IATA | 1170 ETHANOL (ETHYL ALCOHOL) mixture ETHANOL (ETHYL ALCOHOL) mixture ETHANOL mixture |
| Transport hazard class(es) | |
| ADR, IMDG, IATA | |
| | |
| Class Label | 3 Flammable liquids 3 |
| Packing group ADR, IMDG, IATA | II |
| Environmental hazards: | Not applicable. |
| Special precautions for user Hazard identification number (Kemler code): EMS Number: Stowage Category | Warning: Flammable liquids : 33 F-E,S-D A |
| Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code | Not applicable. |
| Transport/Additional information: Quantity limitations | On passenger aircraft/rail: 5 L On cargo aircraft only: 60 L |
| ADR Excepted quantities (EQ) | Code: E2 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 500 ml |

Printing date 02/13/2024 Reviewed on 05/18/2023

Trade name: Glucose, D-[6-3H(N)]-, HPLC Purified

(Contd. of page 6)

· IMDG

· Limited quantities (LQ)

· Excepted quantities (EQ)

Code: E2

1L

Maximum net quantity per inner packaging: 30 ml

Maximum net quantity per outer packaging: 500 ml

· UN "Model Regulation": UN 1170 ETHANOL (ETHYL ALCOHOL) MIXTURE, 3, II

15 Regulatory information

- · Safety, health and environmental regulations/legislation specific for the substance or mixture No further relevant information available.
- · Sara

| · Section 355 | (extremely | hazardous | substances) | : |
|---------------|------------|-----------|-------------|---|
|---------------|------------|-----------|-------------|---|

None of the ingredients is listed.

Section 313 (Specific toxic chemical listings):

None of the ingredients is listed.

| ٠ | <i>TSCA</i> | (Toxic | Substances | Control | <i> Act):</i> |
|---|-------------|--------|------------|---------|----------------|
|---|-------------|--------|------------|---------|----------------|

| 64-17-5 | ethanol | ACTIVE |
|-----------|---------|--------|
| 7732-18-5 | Water | ACTIVE |
| 50-99-7 | glucose | ACTIVE |

Hazardous Air Pollutants

None of the ingredients is listed.

- Proposition 65
- Chemicals known to cause cancer:

Radionuclide

Chemicals known to cause reproductive toxicity for females:

None of the ingredients is listed.

Chemicals known to cause reproductive toxicity for males:

None of the ingredients is listed.

Chemicals known to cause developmental toxicity:

None of the ingredients is listed.

- · Carcinogenic categories
- · EPA (Environmental Protection Agency)

None of the ingredients is listed.

TLV (Threshold Limit Value)

64-17-5 ethanol

A3

· NIOSH-Ca (National Institute for Occupational Safety and Health)

None of the ingredients is listed.

· Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

16 Other information

The information provided in this safety data sheet is based on our current knowledge, and is believed to be correct at the date of publication. However, no representation is made concerning its accuracy and completeness. It is intended as guidance only, and is not to be regarded as a

Printing date 02/13/2024 Reviewed on 05/18/2023

Trade name: Glucose, D-[6-3H(N)]-, HPLC Purified

(Contd. of page 7

warranty or specification of quality. All materials may present unknown hazards and should be used with caution. Although certain hazards are described, we cannot guarantee that these are the only hazards that exist. Revvity, Inc. cannot be held liable for any damage resulting from handling or contact with the product.

· Contact:

· Date of preparation / last revision 02/13/2024

· Abbreviations and acronyms:

ADR: Accord relatif au transport international des marchandises dangereuses par route (European Agreement Concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation

IATA: International Air Transport Association

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

NFPA: National Fire Protection Association (USA) VOC: Volatile Organic Compounds (USA, EU) PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative NIOSH: National Institute for Occupational Safety

OSHA: Occupational Safety & Health TLV: Threshold Limit Value PEL: Permissible Exposure Limit REL: Recommended Exposure Limit

Flammable Liquids 2: Flammable liquids – Category 2

- US