| 02/22/2024   | Kit Components                             |  |
|--------------|--|--|
| Product code | Description                                |  |
| 3041-0020    | Neobase Non-derivatized Assay<br>3041-0020 |  |
| Components:  |  |  |
| 13808126     | NeoBase Flow Solvent                       |  |
| 13808127     | NeoBase Extraction Solution                |  |



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Safety Data Sheet acc. to OSHA HCS

Printing date 02/22/2024

Reviewed on 10/31/2023

| · Product identifier   |  |
|--|--|
| • Trade name: <u>NeoBase Flow Solvent</u>  |  |
| • Article number: 13808126<br>• Application of the substance / the mix<br>Laboratory chemicals<br>In vitro diagnostics   | cture  |
| • Details of the supplier of the safety da<br>• Manufacturer/Supplier:<br>Revvity Inc.<br>Wallac Oy<br>P.O. Box 10<br>FI-20101 Turku<br>Finland<br>+358 2 2678 111   | ata sheet  |
| <ul> <li>Information department:<br/>Product safety department.<br/>MSDS_Turku@revvity.com</li> <li>Emergency telephone number:<br/>CHEMTREC (within U.S.) 800 424-93<br/>CHEMTREC (from outside U.S.) +1-7</li> </ul> |  |
| v  |  |
| 2 Hazard(s) identification   |  |
| · /  |  |
| 2 Hazard(s) identification<br>• Classification of the substance or mix   |  |
| 2 Hazard(s) identification<br>• Classification of the substance or mix<br>GHS02 Flame  | cture<br>H225 Highly flammable liquid and vapor. |
| 2 Hazard(s) identification<br>Classification of the substance or mix<br>GHS02 Flame<br>Flammable Liquids 2   | cture<br>H225 Highly flammable liquid and vapor. |
| 2 Hazard(s) identification<br>Classification of the substance or mix<br>GHS02 Flame<br>Flammable Liquids 2<br>GHS06 Skull and crossbone  | cture<br>H225 Highly flammable liquid and vapor. |
| 2 Hazard(s) identification<br>Classification of the substance or mix<br>GHS02 Flame<br>Flammable Liquids 2<br>GHS06 Skull and crossbone<br>Acute Toxicity - Inhalation 3<br>GHS08 Health hazard                        | cture<br>H225 Highly flammable liquid and vapor. |

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Trade name: NeoBase Flow Solvent

(Contd. of page 1)

| GHS02 GHS06 GHS08  |             |
|--|-------------|
|  |             |
| Signal word Danger   |             |
| Hazard-determining components of labeling:   |             |
| methanol   |             |
| Hazard statements  |             |
| Highly flammable liquid and vapor.   |             |
| Toxic if inhaled.  |             |
| Causes damage to the central nervous system and the visual organs.                         |             |
| 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.                             |             |
| Use only non-sparking tools.   |             |
| Take precautionary measures against static discharge.                                      |             |
| Do not breathe dust/fume/gas/mist/vapors/spray.  |             |
| Wash thoroughly after handling.  |             |
| Do not eat, drink or smoke when using this product.  |             |
| Use only outdoors or in a well-ventilated area.  |             |
| Wear protective gloves/protective clothing/eye protection/face protection.                 |             |
| If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with wate | r/shower.   |
| IF INHALED: Remove person to fresh air and keep comfortable for breathing.                 |             |
| IF exposed: Call a POISON CENTER or doctor/physician.                                      |             |
| Specific treatment (see on this label).  |             |
| In case of fire: Use CO2, powder or water spray to extinguish.                             |             |
| Store in a well-ventilated place. Keep container tightly closed.                           |             |
| Store in a well-ventilated place. Keep cool.   |             |
| Store locked up.   |             |
| Dispose of contents/container in accordance with local/regional/national/international re- | egulations. |
| Classification system:   | 0           |
| NFPA ratings (scale 0 - 4)   |             |
| Health = 1   |             |
| $\frac{3}{Fire = 3}$   |             |
| 1 $0$ Reactivity = 0   |             |
| HMIS-ratings (scale 0 - 4)   |             |
|  |             |
|  |             |
| FIRE 3 $Fire = 3$  |             |
| <b>REACTIVITY</b> $0$ <i>Reactivity</i> $= 0$  |             |
| Other hazards  |             |
| Other nazaras<br>Results of PBT and vPvB assessment  |             |
| <b>PBT:</b> Not applicable.  |             |
|  |             |
| <b>vPvB:</b> Not applicable.   |             |

· Chemical characterization: Mixtures

• **Description:** Mixture of the substances listed below with nonhazardous additions.

(Contd. on page 3)

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Trade name: NeoBase Flow Solvent

|              |             | (Contd. of page 2) |
|--------------|-------------|--------------------|
| · Dangerous  | components: |                    |
| 67-56-1 m    | ethanol     | 50-75%             |
| · Other ingr |             |                    |
| 7732-18-5    |             | 25-50%             |
| 144-62-7     | oxalic acid | <0.1%              |
|              |             |                    |

#### 4 First-aid measures

#### · Description of first aid measures

- · General information:
- Immediately remove any clothing soiled by the product.
- *Remove breathing apparatus only after contaminated clothing have been completely removed. In case of irregular breathing or respiratory arrest provide artificial respiration.*
- After inhalation:

Supply fresh air or oxygen; call for doctor.

In case of unconsciousness place patient stably in side position for transportation.

- After skin contact: Immediately wash with water and soap and rinse thoroughly.
- After eye contact: Rinse opened eye for several minutes under running water. Then consult a doctor.
- 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.

• Special hazards arising from the substance or mixture During heating or in case of fire poisonous gases are produced.

• Advice for firefighters

• Protective equipment: Mouth respiratory protective device.

#### 6 Accidental release measures

- Personal precautions, protective equipment and emergency procedures Mount respiratory protective device.
   Wear protective equipment. Keep unprotected persons away.
   Environmental precautions: Prevent seepage into sewage system, workpits and cellars. Dilute with plenty of 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:

67-56-1 methanol

530 ppm (Contd. on page 4)

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Trade name: NeoBase Flow Solvent

| 144-62-7 | oxalic acid | (Contd. of page 3)<br>2 mg/m <sup>3</sup> |
|----------|-------------|---|
| · PAC-2: |             |   |
| 67-56-1  | methanol    | 2,100 ppm                                 |
| 144-62-7 | oxalic acid | $20 \text{ mg/m}^3$                       |
| · PAC-3: |             |   |
| 67-56-1  | methanol    | 7200* ppm                                 |
| 144-62-7 | oxalic acid | 500 mg/m <sup>3</sup>                     |

# 7 Handling and storage

· Handling:

• **Precautions for safe handling** Ensure good ventilation/exhaustion at the workplace. Open and handle receptacle with care. Prevent formation of aerosols.

• Information about protection against explosions and fires: Keep ignition sources away - Do not smoke. Protect against electrostatic charges. Keep respiratory protective device available.

· Conditions for safe storage, including any incompatibilities

· Storage:

• *Requirements to be met by storerooms and receptacles: 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.

• 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  | ponents with limit values that require monitoring at the workplace:                             |                    |
|--------|---|--------------------|
| 67-5   | 6-1 methanol  |                    |
| PEL    | Long-term value: 260 mg/m <sup>3</sup> , 200 ppm  |                    |
| REL    | Short-term value: 325 mg/m³, 250 ppm<br>Long-term value: 260 mg/m³, 200 ppm<br>Skin             |                    |
| TLV    | Short-term value: 250 ppm<br>Long-term value: 200 ppm<br>Skin; BEI                              |                    |
| · Ingr | edients with biological limit values:   |                    |
| 67-5   | 6-1 methanol  |                    |
| BEI    | 15 mg/L<br>Medium: urine<br>Time: end of shift<br>Parameter: Methanol (background, nonspecific) |                    |
| · Addi | itional information: The lists that were valid during the creation were used as basis.          | (Contd. on page 5) |

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Trade name: NeoBase Flow Solvent

(Contd. of page 4)

- · Exposure controls
- · Personal protective equipment:

• General protective and hygienic measures: Keep away from foodstuffs, beverages and feed. Immediately remove all soiled and contaminated clothing. Wash hands before breaks and at the end of work. Store protective clothing separately.

• Breathing equipment:

In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use respiratory protective device that is independent of circulating air.

• Protection of hands:



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation. Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

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.

· 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 observed.

• Eye protection:



Tightly sealed goggles

| Information on basic physical and General Information | chemical properties |  |
|---|---------------------|--|
| Appearance:   |                     |  |
| Form:   | Solution            |  |
| Color:  | Colorless           |  |
| Odor:   | Characteristic      |  |
| Odor threshold:                                       | Not determined.     |  |
| pH-value:   | Not determined.     |  |
| Change in condition                                   |                     |  |
| Melting point/Melting range:                          | Undetermined.       |  |
| Boiling point/Boiling range:                          | Undetermined.       |  |
| Flash point:  | 11 °C (51.8 °F)     |  |
| Flammability (solid, gaseous):                        | Highly flammable.   |  |
| Auto igniting:  | 455 °C (851 °F)     |  |
| Decomposition temperature:                            | Not determined.     |  |

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Trade name: NeoBase Flow Solvent

|                                       | (Contd. of page 5   |
|---------------------------------------|---|
| Ignition temperature:                 | Product is not selfigniting.  |
| Danger of explosion:                  | Product is not explosive. However, formation of explosive air/vapor<br>mixtures are possible. |
| Explosion limits:                     |   |
| Lower:                                | 5.5 Vol %   |
| Upper:                                | 44 Vol %  |
| Vapor pressure at 20 °C (68 °F):      | 128 hPa (96 mm Hg)  |
| Density:                              | Not determined.   |
| Relative density                      | Not determined.   |
| Vapor density                         | Not determined.   |
| Evaporation rate                      | Not determined.   |
| Solubility in / Miscibility with      |   |
| Water:                                | Fully miscible.   |
| Partition coefficient (n-octanol/wate | e <b>r):</b> Not determined.  |
| Viscosity:                            |   |
| Dynamic:                              | Not determined.   |
| Kinematic:                            | Not determined.   |
| Solvent content:                      |   |
| Organic solvents:                     | 73.7 %  |
| Water:                                | 26.3 %  |
| VOC content:                          | 73.67 %   |
| Other information                     | 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:

· LD/LC50 values that are relevant for classification:

67-56-1 methanol

Oral LD50 5,628 mg/kg (rat)

Dermal LD50 15,800 mg/kg (rabbit)

• Primary irritant effect:

• on the skin: No irritant effect.

- on the eye: No irritating effect.
- Sensitization: No sensitizing effects known.
- Additional toxicological information:

The product shows the following dangers according to internally approved calculation methods for preparations:

Toxic

(Contd. on page 7)

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Reviewed on 10/31/2023

Trade name: NeoBase Flow Solvent

(Contd. of page 6)

- · 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.
- Additional ecological information:

· General notes:

Water hazard class 2 (Self-assessment): hazardous for water

Do not allow product to reach ground water, water course or sewage system.

- Danger to drinking water if even small quantities leak into the ground.
- · Results of PBT and vPvB assessment
- · **PBT:** Not applicable.
- **vPvB:** Not applicable.
- · Other adverse effects No further relevant information available.

# **13 Disposal considerations**

· Waste treatment methods

· Recommendation:

Must not be disposed of together with household garbage. Do not allow product to reach sewage system.

- · Uncleaned packagings:
- · Recommendation: Hand over to hazardous waste disposers.
- · Recommended cleansing agent: Water, if necessary with cleansing agents.

| UN1230                |   |
|-----------------------|---|
|                       |   |
| Methanol mixture      |   |
| 1230 METHANOL mixture |   |
| METHANOL mixture      |   |
|                       |   |
|                       |   |
| 3 Flammable liquids   |   |
|                       | Methanol mixture<br>1230 METHANOL mixture<br>METHANOL mixture |

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Trade name: NeoBase Flow Solvent

|  | (Contd. of pa   |
|--|---|
| Label  | 3, 6.1  |
| ADR  |   |
|  |   |
| 3 6  |   |
| Class  | 3 Flammable liquids   |
| Label  | 3+6.1   |
| IMDG   |   |
|  |   |
| Class  | 3 Flammable liquids   |
| Label  | 3/6.1   |
| IATA   |   |
|  |   |
| Class  | 3 Flammable liquids   |
| Label  | 3 (6.1)   |
| Packing group<br>DOT, ADR, IMDG, IATA                      | 11  |
| Environmental hazards:<br>Marine pollutant:                | No  |
| Special precautions for user                               | Warning: Flammable liquids  |
| Hazard identification number (Kemler code).<br>EMS Number: |   |
| LMS Number:<br>Stowage Category                            | F-E,S-D<br>B  |
| Stowage Code   | SW2 Clear of living quarters.   |
| Transport in bulk according to Annex II of                 |   |
| MARPOL73/78 and the IBC Code                               | Not applicable.   |
| Transport/Additional information:                          |   |
| DOT  |   |
| Quantity limitations                                       | On passenger aircraft/rail: 1 L   |
|  | On cargo aircraft only: 60 L  |
| ADR  |   |
| Excepted quantities (EQ)                                   | Code: E2<br>Maximum not quantity non inner nachaging: 20 ml   |
|  | Maximum net quantity per inner packaging: 30 ml<br>Maximum net quantity per outer packaging: 500 ml |
| IMDG   |   |
| Limited quantities (LQ)                                    | IL  |
| Excepted quantities ( $\widetilde{E}Q$ )                   | Code: E2  |
|  | Maximum net quantity per inner packaging: 30 ml   |
|  | Maximum net quantity per outer packaging: 500 ml  |
| UN "Model Regulation":                                     | UN 1230 METHANOL MIXTURE, 3 (6.1), II   |

(Contd. on page 9)

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Trade name: NeoBase Flow Solvent

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(Contd. of page 8)

| 15 Regulatory information   |                     |
|---|---------------------|
| • Safety, health and environmental regulations/legislation specific for the substance or mixe<br>No further relevant information available.<br>• Sara               | ture                |
| Survey Section 355 (extremely hazardous substances):  |                     |
| None of the ingredients is listed.  |                     |
|   |                     |
| • Section 313 (Specific toxic chemical listings):<br>67-56-1 methanol   |                     |
|   |                     |
| TSCA (Toxic Substances Control Act):  |                     |
| All components have the value ACTIVE.   |                     |
| · Hazardous Air Pollutants  |                     |
| 67-56-1 methanol  |                     |
| · Proposition 65  |                     |
| Chemicals known to cause cancer:  |                     |
| None of the ingredients is listed.  |                     |
| 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:  |                     |
| 67-56-1 methanol  |                     |
| Canain a gatagonias   |                     |
| Carcinogenic categories     · EPA (Environmental Protection Agency)   |                     |
| None of the ingredients is listed.  |                     |
|   |                     |
| • TLV (Threshold Limit Value)   |                     |
| None of the ingredients is listed.  |                     |
| ·NIOSH-Ca (National Institute for Occupational Safety and Health)   |                     |
| None of the ingredients is listed.<br>• <b>GHS label elements</b>   |                     |
| The product is classified and labeled according to the Globally Harmonized System (GHS).<br>• Hazard pictograms<br>GHS02 GHS06 GHS08                                |                     |
| · Signal word Danger  |                     |
| <ul> <li>Hazard-determining components of labeling:<br/>methanol</li> <li>Hazard statements<br/>Highly flammable liquid and vapor.<br/>Toxic if inhaled.</li> </ul> |                     |
| Causes damage to the central nervous system and the visual organs.<br>• <b>Precautionary statements</b>   |                     |
| Keep away from heat/sparks/open flames/hot surfaces No smoking.   |                     |
| Ground/bond container and receiving equipment.  |                     |
| Use explosion-proof electrical/ventilating/lighting/equipment.  |                     |
| Use only non-sparking tools.<br>Take precautionary measures against static discharge.   |                     |
| Tune precumionary measures againsi siane aisenarge.   | (Contd. on page 10) |
|   | 1.5                 |

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#### Trade name: NeoBase Flow Solvent

|   | of page 9) |
|---|------------|
| Do not breathe dust/fume/gas/mist/vapors/spray.   |            |
| Wash thoroughly after handling.   |            |
| Do not eat, drink or smoke when using this product.   |            |
| Use only outdoors or in a well-ventilated area.   |            |
| 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. |            |
| IF INHALED: Remove person to fresh air and keep comfortable for breathing.                          |            |
| IF exposed: Call a POISON CENTER or doctor/physician.   |            |
| Specific treatment (see on this label).   |            |
| In case of fire: Use CO2, powder or water spray to extinguish.                                      |            |
| Store in a well-ventilated place. Keep container tightly closed.                                    |            |
| Store in a well-ventilated place. Keep cool.  |            |
| Store locked up.  |            |
| Dispose of contents/container in accordance with local/regional/national/international regulations. |            |

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

## **16 Other information**

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

- · Department issuing SDS: Product safety department.
- · Contact: MSDS Turku@revvity.com
- · Date of preparation / last revision 02/22/2024
- Abbreviations and acronyms:

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail) ICAO: International Civil Aviation Organisation 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) HMIS: Hazardous Materials Identification System (USA) VOC: Volatile Organic Compounds (USA, EU) LC50: Lethal concentration, 50 percent LD50: Lethal dose, 50 percent 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 BEI: Biological Exposure Limit Flammable Liquids 2: Flammable liquids – Category 2 Acute Toxicity - Inhalation 3: Acute toxicity - Category 3 Specific Target Organ Toxicity - Single Exposure 1: Specific target organ toxicity (single exposure) - Category 1 \* Data compared to the previous version altered.



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Safety Data Sheet acc. to OSHA HCS

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| · Product identifier   |   |
|--|---|
| • Trade name: <u>NeoBase Extraction Solu</u>   | tion  |
| • Article number: 13808127<br>• Application of the substance / the mixt<br>Laboratory chemicals<br>In vitro diagnostics  | ure   |
| • Details of the supplier of the safety data<br>• Manufacturer/Supplier:<br>Revvity Inc.<br>Wallac Oy<br>P.O. Box 10<br>FI-20101 Turku<br>Finland<br>+358 2 2678 111   | a sheet   |
| <ul> <li>Information department:<br/>Product safety department.<br/>MSDS_Turku@revvity.com</li> <li>Emergency telephone number:<br/>CHEMTREC (within U.S.) 800 424-930<br/>CHEMTREC (from outside U.S.) +1-70</li> </ul> |   |
|  |   |
| 2 Hazard(s) identification<br>• Classification of the substance or mixt  | ure   |
|  | ure   |
| • Classification of the substance or mixt  | <b>ure</b><br>H225 Highly flammable liquid and vapor. |
| • Classification of the substance or mixt  | H225 Highly flammable liquid and vapor.               |
| Classification of the substance or mixt<br>GHS02 Flame<br>Flammable Liquids 2  | H225 Highly flammable liquid and vapor.               |
| Classification of the substance or mixter<br>GHS02 Flame<br>Flammable Liquids 2<br>GHS06 Skull and crossbones  | H225 Highly flammable liquid and vapor.               |
| Classification of the substance or mixt<br>GHS02 Flame<br>Flammable Liquids 2<br>GHS06 Skull and crossbones<br>Acute Toxicity - Inhalation 3<br>GHS08 Health hazard  | H225 Highly flammable liquid and vapor.               |

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Trade name: NeoBase Extraction Solution (Contd. of page 1) · Hazard pictograms GHS02 GHS06 GHS08 · Signal word Danger · Hazard-determining components of labeling: methanol · Hazard statements Highly flammable liquid and vapor. Toxic if inhaled. Causes damage to the central nervous system and the visual organs. · 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. Use only non-sparking tools. Take precautionary measures against static discharge. Do not breathe dust/fume/gas/mist/vapors/spray. Wash thoroughly after handling. Do not eat, drink or smoke when using this product. Use only outdoors or in a well-ventilated area. 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. IF INHALED: Remove person to fresh air and keep comfortable for breathing. IF exposed: Call a POISON CENTER or doctor/physician. Specific treatment (see on this label). In case of fire: Use CO2, powder or water spray to extinguish. Store in a well-ventilated place. Keep container tightly closed. Store in a well-ventilated place. Keep cool. Store locked up. Dispose of contents/container in accordance with local/regional/national/international regulations. · Classification system: · NFPA ratings (scale 0 - 4) Health = 1Fire = 3Reactivity = 0· HMIS-ratings (scale 0 - 4) HEALTH \*1 *Health* = \*1FIRE Fire = 33 **REACTIVITY O** Reactivity = 0· Other hazards · Results of PBT and vPvB assessment · **PBT:** Not applicable. · vPvB: Not applicable. **3** Composition/information on ingredients

· Chemical characterization: Mixtures

· Description: Mixture of the substances listed below with nonhazardous additions.

(Contd. on page 3)

<sup>-</sup> US

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Trade name: NeoBase Extraction Solution

|                         | (Contd. of page 2) |
|-------------------------|--------------------|
| · Dangerous components: |                    |
| 67-56-1 methanol        | 50-75%             |
| • Other ingredients     |                    |
| 7732-18-5 water         | 25-50%             |
| 144-62-7 oxalic acid    | <0.1%              |
|                         |                    |

#### 4 First-aid measures

#### · Description of first aid measures

- · General information:
- Immediately remove any clothing soiled by the product.

*Remove breathing apparatus only after contaminated clothing have been completely removed. In case of irregular breathing or respiratory arrest provide artificial respiration.* 

• After inhalation:

Supply fresh air or oxygen; call for doctor.

In case of unconsciousness place patient stably in side position for transportation.

- After skin contact: Immediately wash with water and soap and rinse thoroughly.
- After eye contact: Rinse opened eye for several minutes under running water. Then consult a doctor.
- 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.

• Special hazards arising from the substance or mixture During heating or in case of fire poisonous gases are produced.

· Advice for firefighters

• Protective equipment: Mouth respiratory protective device.

#### 6 Accidental release measures

- Personal precautions, protective equipment and emergency procedures Mount respiratory protective device.
   Wear protective equipment. Keep unprotected persons away.
   Environmental precautions: Prevent seepage into sewage system, workpits and cellars. Dilute with plenty of 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**:

67-56-1 methanol

530 ppm (Contd. on page 4)

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| 144-62-7 oxalic acid | (Contd. of page 3)<br>2 mg/m <sup>3</sup> |
|----------------------|---|
| · PAC-2:             |   |
| 67-56-1 methanol     | 2,100 ppm                                 |
| 144-62-7 oxalic acid | $20 \text{ mg/m}^3$                       |
| · PAC-3:             |   |
| 67-56-1 methanol     | 7200* ppm                                 |
| 144-62-7 oxalic acid | 500 mg/m <sup>3</sup>                     |

# 7 Handling and storage

#### · Handling:

• **Precautions for safe handling** Ensure good ventilation/exhaustion at the workplace. Open and handle receptacle with care. Prevent formation of aerosols.

• Information about protection against explosions and fires: Keep ignition sources away - Do not smoke. Protect against electrostatic charges. Keep respiratory protective device available.

• Conditions for safe storage, including any incompatibilities

· Storage:

• Requirements to be met by storerooms and receptacles: 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.

• 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:                        |                    |
|------------------|---|--------------------|
| 67-56-1 methanol |   |                    |
| PEL              | Long-term value: 260 mg/m <sup>3</sup> , 200 ppm  |                    |
| REL              | Short-term value: 325 mg/m³, 250 ppm<br>Long-term value: 260 mg/m³, 200 ppm<br>Skin             |                    |
| TLV              | Short-term value: 250 ppm<br>Long-term value: 200 ppm<br>Skin; BEI                              |                    |
| · Ingre          | edients with biological limit values:   |                    |
| 67-5             | 6-1 methanol  |                    |
|                  | 15 mg/L<br>Medium: urine<br>Time: end of shift<br>Parameter: Methanol (background, nonspecific) |                    |
| · Addi           | <i>tional information:</i> The lists that were valid during the creation were used as basis.    | (Contd. on page 5) |

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- · Exposure controls
- · Personal protective equipment:

• General protective and hygienic measures: Keep away from foodstuffs, beverages and feed. Immediately remove all soiled and contaminated clothing. Wash hands before breaks and at the end of work. Store protective clothing separately.

• Breathing equipment:

In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use respiratory protective device that is independent of circulating air.

• Protection of hands:



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation. Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

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.

· 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 observed.

• Eye protection:



Tightly sealed goggles

| Information on basic physical and General Information | chemical properties |  |
|---|---------------------|--|
| Appearance:   |                     |  |
| Form:   | Solution            |  |
| Color:  | Colorless           |  |
| Odor:   | Characteristic      |  |
| Odor threshold:                                       | Not determined.     |  |
| pH-value:   | Not determined.     |  |
| Change in condition                                   |                     |  |
| Melting point/Melting range:                          | Undetermined.       |  |
| Boiling point/Boiling range:                          | Undetermined.       |  |
| Flash point:  | 11 °C (51.8 °F)     |  |
| Flammability (solid, gaseous):                        | Highly flammable.   |  |
| Auto igniting:  | 455 °C (851 °F)     |  |
| Decomposition temperature:                            | Not determined.     |  |

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|                                       | (Contd. of page :   |
|---------------------------------------|---|
| Ignition temperature:                 | Product is not selfigniting.  |
| Danger of explosion:                  | Product is not explosive. However, formation of explosive air/vapor<br>mixtures are possible. |
| Explosion limits:                     |   |
| Lower:                                | 5.5 Vol %   |
| Upper:                                | 44 Vol %  |
| · Vapor pressure at 20 °C (68 °F):    | 128 hPa (96 mm Hg)  |
| Density:                              | Not determined.   |
| Relative density                      | Not determined.   |
| Vapor density                         | Not determined.   |
| Evaporation rate                      | Not determined.   |
| Solubility in / Miscibility with      |   |
| Water:                                | Fully miscible.   |
| Partition coefficient (n-octanol/wate | e <b>r):</b> Not determined.  |
| Viscosity:                            |   |
| Dynamic:                              | Not determined.   |
| Kinematic:                            | Not determined.   |
| Solvent content:                      |   |
| Organic solvents:                     | 73.7 %  |
| Water:                                | 26.3 %  |
| VOC content:                          | 73.67 %   |
| Other information                     | 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:

· LD/LC50 values that are relevant for classification:

67-56-1 methanol

Oral LD50 5,628 mg/kg (rat)

Dermal LD50 15,800 mg/kg (rabbit)

· Primary irritant effect:

• on the skin: No irritant effect.

- on the eye: No irritating effect.
- Sensitization: No sensitizing effects known.
- Additional toxicological information:

The product shows the following dangers according to internally approved calculation methods for preparations:

Toxic

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- · 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.
- Additional ecological information:

· General notes:

Water hazard class 2 (Self-assessment): hazardous for water

Do not allow product to reach ground water, water course or sewage system.

- Danger to drinking water if even small quantities leak into the ground.
- · Results of PBT and vPvB assessment
- · **PBT:** Not applicable.
- **vPvB:** Not applicable.
- · Other adverse effects No further relevant information available.

#### **13 Disposal considerations**

· Waste treatment methods

· Recommendation:

Must not be disposed of together with household garbage. Do not allow product to reach sewage system.

- · Uncleaned packagings:
- · Recommendation: Hand over to hazardous waste disposers.
- · Recommended cleansing agent: Water, if necessary with cleansing agents.

| UN-Number<br>DOT, ADR, IMDG, IATA | UN1230                |  |
|-----------------------------------|-----------------------|--|
| · UN proper shipping name         |                       |  |
| DOT                               | Methanol mixture      |  |
| · ADR                             | 1230 METHANOL mixture |  |
| · IMDG, IATA                      | METHANOL mixture      |  |
| • Transport hazard class(es)      |                       |  |
| ·DOT                              |                       |  |
|                                   |                       |  |
| 3 6                               |                       |  |
| · Class                           | 3 Flammable liquids   |  |

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|   | (Contd. of pa   |
|---|---|
| Label   | 3, 6.1  |
| ADR   |   |
| Class<br>Label  | 3 Flammable liquids<br>3+6.1  |
| IMDG  | 5 • 0.1   |
|   |   |
| Class<br>Label  | 3 Flammable liquids<br>3/6.1  |
| IATA  |   |
|   |   |
| Class<br>Label  | 3 Flammable liquids<br>3 (6.1)  |
| Packing group<br>DOT, ADR, IMDG, IATA   | Ш   |
| Environmental hazards:<br>Marine pollutant:   | No  |
| Special precautions for user<br>Hazard identification number (Kemler code)<br>EMS Number:<br>Stowage Category | F-E,S-D<br>B  |
| Stowage Code<br>Transport in bulk according to Annex II of<br>MARPOL73/78 and the IBC Code                    | SW2 Clear of living quarters. Not applicable.   |
| Transport/Additional information:   |   |
| DOT   |   |
| Quantity limitations  | On passenger aircraft/rail: 1 L<br>On cargo aircraft only: 60 L   |
| ADR<br>Excepted quantities (EQ)   | Code: E2<br>Maximum net quantity per inner packaging: 30 ml<br>Maximum net quantity per outer packaging: 500 ml       |
| IMDG<br>Limited quantities (LQ)<br>Excepted quantities (EQ)   | 1L<br>Code: E2<br>Maximum net quantity per inner packaging: 30 ml<br>Maximum net quantity per outer packaging: 500 ml |
| UN "Model Regulation":  | UN 1230 METHANOL MIXTURE, 3 (6.1), II   |

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# **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): 67-56-1 methanol · TSCA (Toxic Substances Control Act): All components have the value ACTIVE. · Hazardous Air Pollutants 67-56-1 methanol · Proposition 65 · Chemicals known to cause cancer: None of the ingredients is listed. · 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: 67-56-1 methanol · Carcinogenic categories · EPA (Environmental Protection Agency) None of the ingredients is listed. • TLV (Threshold Limit Value) None of the ingredients is listed. · NIOSH-Ca (National Institute for Occupational Safety and Health) None of the ingredients is listed. · GHS label elements The product is classified and labeled according to the Globally Harmonized System (GHS). · Hazard pictograms



· Signal word Danger

Hazard-determining components of labeling: methanol
Hazard statements Highly flammable liquid and vapor. Toxic if inhaled.
Causes damage to the central nervous system and the visual organs.
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. Use only non-sparking tools. Take precautionary measures against static discharge.

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(Contd. of page 9) Do not breathe dust/fume/gas/mist/vapors/spray. Wash thoroughly after handling. Do not eat, drink or smoke when using this product. Use only outdoors or in a well-ventilated area. 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. IF INHALED: Remove person to fresh air and keep comfortable for breathing. IF exposed: Call a POISON CENTER or doctor/physician. Specific treatment (see on this label). In case of fire: Use CO2, powder or water spray to extinguish. Store in a well-ventilated place. Keep container tightly closed. Store in a well-ventilated place. Keep cool. Store locked up. Dispose of contents/container in accordance with local/regional/national/international regulations.

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

# 16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

- · Department issuing SDS: Product safety department.
- · Contact: MSDS\_Turku@revvity.com
- · Date of preparation / last revision 02/22/2024
- · Abbreviations and acronyms:

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail) ICAO: International Civil Aviation Organisation 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) HMIS: Hazardous Materials Identification System (USA) VOC: Volatile Organic Compounds (USA, EU) LC50: Lethal concentration, 50 percent LD50: Lethal dose, 50 percent 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 BEI: Biological Exposure Limit Flammable Liquids 2: Flammable liquids – Category 2 Acute Toxicity - Inhalation 3: Acute toxicity - Category 3 Specific Target Organ Toxicity - Single Exposure 1: Specific target organ toxicity (single exposure) - Category 1 \* Data compared to the previous version altered.