

Material Safety Data Sheet

1. Identification of substance:

Trade name: (R)-2-HG Product Number: M60104-2s Manufacturer/Supplier: Xcess Biosciences Inc. 7144 N Harlem Ave #169 Chicago, IL 60631 USA Phone: 1-866-706-2330 Fax: 1-619-810-0718

2. Composition/data on components:

Chemical Name: sodium (R)-2-hydroxypentanedioate Synonyms: (R)-2-HG Hazardous Ingredient: Optovin CAS Registry Number: 103404-90-6 Molecular Weight: 192.08 Molecular Formula: C5H6Na2O5

3. Hazards identification:

Hazard Description: Contains a pharmaceutically active ingredient. Substance not fully tested May be harmful if swallowed or inhaled. May cause irritation of the respiratory tract, eye, and skin. Handling should only be performed by personnel trained and familiar with handling of potent active pharmaceutical ingredients.

4. First aid measures:

After Inhalation: If inhaled, remove to fresh air; if breathing is difficult, give oxygen; if breathing stops, give artificial respiration.

After skin contact: flush with copious amounts of water; remove contaminated clothing and shoes; call a physician.

After eye contact: check for and remove contact lenses; flush with copious amounts of water; assure adequate flushing by separating the eyelids with fingers; call a physician

After swallowing: if swallowed, wash out mouth with copious amounts of water; call a physician

5. Firefighting measures:

Suitable extinguishing agents: water spray, carbon dioxide, dry chemical powder or foam. **Protective equipment:** wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes.

Unusual fire hazard: emits toxic fumes such as carbon monoxide, etc.

6. Accidental release measures:

Person-related safety precautions: cordon off area of spill; wear self-contained breathing apparatus, protective clothing and heavy rubber gloves.



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Measures for cleaning/collecting: absorb solutions with finely-powdered liquid-binding material (diatomite, universal binders); decontaminate surfaces and equipment by scrubbing with alcohol; dispose of contaminated material according to Section 13.

7. Handling and storage:

Information for safe handling: Handle with care and avoid unnecessary exposure. Avoid inhalation. Avoid contact with eyes, skin, and clothing. Use protective equipment to minimize exposure. Avoid prolonged or repeated exposure. Handle compound in a laboratory fume hood. Storage: store solid and solutions at 4°C or -20°C for longer time storage.

8. Exposure controls and personal protection:

Engineering controls: safety shower and eye bath; mechanical exhaust required. Personal protective equipment as follows: **Breathing equipment:** NIOSH/MSHA-approved respirator. Protection of hands: chemical-resistant rubber gloves. Eye protection: chemical safety goggles.

9. Physical and chemical properties:

Form: Crystalline solid; granular or powder Danger of explosion: none Solvent content: none Solubility: DMSO

10. Stability and reactivity:

Stability: stable if stored as directed; avoid strong oxidizing agents Conditions to avoid: protect from light and heat Material to avoid: acids and bases Dangerous products of decomposition: thermal decomposition may produce toxic gases such as carbon monoxide, carbon dioxide, and nitrogen oxides

11. Toxicological information:

RTECS No: not available Acute toxicity: not known Primary irritant effect: not known On the skin: not known; may be an irritant On the eye: not known; may be an irritant Effects of Short-Term Exposure: not available Effects of Long-Term Exposure: not available Sensitization to Product: not available Carcinogenicity: not available Reproductive Toxicity: not available Teratogenicity and Embryotoxicity: not available Mutagenicity: not available



12. Ecological information:

Ecotoxicity: not known

13. Disposal consideration:

Dispose of in accordance with prevailing country, federal, state and local regulations

14. Transport information:

DOT:

Proper shipping name: none

Non-Hazardous for transport: this substance is considered to be non-hazardous for transport **IATA class:**

Proper shipping name: none

Non-Hazardous for transport: this substance is considered to be non-hazardous for transport

15. Regulations:

Code letter and hazard designation of product:

Hazard-determining components of labeling:

EU Risk and safety phrases:

- •S24/25: Avoid contact with skin and eyes
- •S26: In case of contact with eyes, rinse immediately with plenty of water and seek medical advice
- •S28: After contact with skin, wash immediately with plenty of water
- •S36/37/39: Wear protective clothing, gloves and eye/face protection
- •R28: Very toxic if swallowed
- •R38: Irritating to skin
- •R41: Risk of serious damages to eyes
- •R48: Toxic; danger of serious damage to health by prolonged exposure
- •R62: Possible risk of impaired fertility
- •R63: Possible risk of harm to unborn child

16. Other information:

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End of safety data sheet