

# SAFETY DATA SHEET

## 1. Identification

Product identifier	Hydrogen Release Compound PRIMER (HRC PRIMER®)	
Other means of identification	None.	
Recommended use	Remediation of soils and groundwater.	
Recommended restrictions	None known.	
Manufacturer/Importer/Supplier/	/Distributor information	
Company Name	REGENESIS	
Address	1011 Calle Sombra	
	San Clemente, CA 92673 USA	
General information	949-366-8000	
E-mail	CustomerService@regenesis.com	
Emergency phone number	For Hazardous Materials Incidents ONLY (spill, leak, fire, exposure or accident), call CHEMTREC 24/7 at:	
USA, Canada	1-800-424-9300	
International	1-703-527-3887	

## 2. Hazard(s) identification

Physical hazards	Not classified.	
Health hazards	Skin corrosion/irritation	Category 2
	Serious eye damage/eye irritation	Category 1
OSHA defined hazards	Not classified.	

#### Label elements



Signal word	Danger	
Hazard statement	Causes skin irritation. Causes serious eye damage.	
Precautionary statement		
Prevention	Wash thoroughly after handling. Wear protective gloves/eye protection/face protection.	
Response	If on skin: Wash with plenty of water. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a poison center/doctor. If skin irritation occurs: Get medical advice/attention. Take off contaminated clothing and wash before reuse.	
Storage	Store away from incompatible materials.	
Disposal	Dispose of waste and residues in accordance with local authority requirements.	
Hazard(s) not otherwise classified (HNOC)	None known.	
Supplemental information	None.	

## 3. Composition/information on ingredients

## **Mixtures**

Chemical name	CAS number	%
Lactic acid	50-21-5	90
Glycerol Tripolylactate	201167-72-8	6-7
Glycerin	56-81-5	3-4
•		

**Composition comments** All concentrations are in percent by weight unless otherwise indicated.

#### 4. First-aid measures Inhalation Move to fresh air. Call a physician if symptoms develop or persist. Remove contaminated clothing. Wash with plenty of soap and water. If skin irritation occurs: Get Skin contact medical advice/attention. Wash contaminated clothing before reuse. Immediately flush eves with plenty of water for at least 15 minutes. Remove contact lenses, if Eye contact present and easy to do. Continue rinsing. Get medical attention immediately. Rinse mouth. Never give anything by mouth to a victim who is unconscious or is having Ingestion convulsions. Do not induce vomiting without advice from poison control center. Get medical attention if symptoms occur. Causes serious eye damage. Symptoms may include stinging, tearing, redness, swelling, and Most important blurred vision. Permanent eye damage including blindness could result. Skin irritation. May cause symptoms/effects, acute and redness and pain. delayed Indication of immediate Provide general supportive measures and treat symptomatically. Keep victim under observation. medical attention and special Symptoms may be delayed. treatment needed **General information** Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

## 5. Fire-fighting measures

Suitable extinguishing media	Water spray. Carbon dioxide (CO2). Dry chemical powder. Foam.	
Unsuitable extinguishing media	Do not use water jet as an extinguisher, as this will spread the fire.	
Specific hazards arising from the chemical	During fire, gases hazardous to health may be formed. Combustion products may include: carbon oxides, phosphorus compounds and metal oxides.	
Special protective equipment and precautions for firefighters	Self-contained breathing apparatus and full protective clothing must be worn in case of fire.	
Fire fighting equipment/instructions	Move containers from fire area if you can do so without risk. Water spray should be used to cool containers.	
Specific methods	Use standard firefighting procedures and consider the hazards of other involved materials.	
General fire hazards	No unusual fire or explosion hazards noted.	

## 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures	Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Wear appropriate protective equipment and clothing during clean-up. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ensure adequate ventilation. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS.
Methods and materials for containment and cleaning up	Large Spills: Stop the flow of material, if this is without risk. Use water spray to reduce vapors or divert vapor cloud drift. Dike the spilled material, where this is possible. Cover with plastic sheet to prevent spreading. Absorb in vermiculite, dry sand or earth and place into containers. Following product recovery, flush area with water.
	Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.
	Never return spills to original containers for re-use. For waste disposal, see section 13 of the SDS.
Environmental precautions	Avoid discharge into drains, water courses or onto the ground.
7. Handling and storage	
Precautions for safe handling	Do not get this material in contact with eyes. Avoid contact with skin, and clothing. Provide adequate ventilation. Wear appropriate personal protective equipment. Observe good industrial hygiene practices.
Conditions for safe storage, including any incompatibilities	Store in original tightly closed container. Store in a cool, dry, well-ventilated place. Store away from incompatible materials (see Section 10 of the SDS). Recommended storage containers: plastic lined steel, plastic, glass, aluminum, stainless steel, or reinforced fiberglass.

## 8. Exposure controls/personal protection

## **Occupational exposure limits**

## US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

Components	Туре	Value	Form
Glycerin (CAS 56-81-5)	PEL	5 mg/m3	Respirable fraction.
		15 mg/m3	Total dust.
Biological limit values	No biological exposure limits noted for the ing	gredient(s).	
Appropriate engineering controls	Good general ventilation should be used. Ver applicable, use process enclosures, local exh maintain airborne levels below recommended established, maintain airborne levels to an ac shower must be available when handling this	aust ventilation, or oth l exposure limits. If exp ceptable level. Eye wa	ner engineering controls to posure limits have not been
ndividual protection measure	s, such as personal protective equipment		
Eye/face protection	Wear approved, tight fitting indirect vented or non-vented safety goggles where splashing is probable. Face shield is recommended.		
Skin protection Hand protection	Wear appropriate chemical resistant gloves. Rubber or vinyl-coated gloves are recommended.		
Skin protection			
Other	Wear appropriate chemical resistant clothing.		
Respiratory protection	If engineering controls do not maintain airborne concentrations below recommended exposure limits (where applicable) or to an acceptable level (in countries where exposure limits have not been established), an approved respirator must be worn. Use filter type A1 according to EN 14387		
Thermal hazards	Wear appropriate thermal protective clothing, when necessary.		
General hygiene considerations	Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.		

## 9. Physical and chemical properties

Appearance	
Physical state	Liquid.
Form	Liquid.
Color	Yellow.
Odor	Odorless.
Odor threshold	Not available.
pН	2 (3% solution/water)
Melting point/freezing point	Not available.
Initial boiling point and boiling range	Not available.
Flash point	Not available.
Evaporation rate	Not available.
Flammability (solid, gas)	Not applicable.
Upper/lower flammability or exp	losive limits
Explosive limit - lower (%)	Not available.
Explosive limit - upper (%)	Not available.
Vapor pressure	Not available.
Vapor density	Not available.
Relative density	1.1 - 1.3 (Water = 1)
Solubility(ies)	
Solubility (water)	Soluble.
Solubility (other)	Acetone and DMSO.
Partition coefficient (n-octanol/water)	Not available.
Auto-ignition temperature	Not available.

Decomposition temperature	Not available.
Viscosity	< 1000 cP

## 10. Stability and reactivity

Reactivity Chemical stability	The product is stable and non-reactive under normal conditions of use, storage and transport. Undergoes hydrolysis in water to form lactic acid and glycerol.
Possibility of hazardous reactions	No dangerous reaction known under conditions of normal use.
Conditions to avoid	Avoid temperatures exceeding the flash point. Contact with incompatible materials.
Incompatible materials	Strong oxidizing agents. Bases. Acids.
Hazardous decomposition products	Thermal decomposition or combustion may produce: carbon oxides, phosphorus compounds, metal oxides.

## 11. Toxicological information

## Information on likely routes of exposure

Inhalation	May cause irritation to the respiratory system.	
Skin contact	Causes skin irritation.	
Eye contact	Causes serious eye damage.	
Ingestion	Ingestion may cause irritation and malaise.	
Symptoms related to the physical, chemical and toxicological characteristics	Causes serious eye damage. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Permanent eye damage including blindness could result. Skin irritation. May cause redness and pain.	

#### Information on toxicological effects

Acute toxicity	Not expected to be acutely toxic.	
Components	Species	Test Results
Glycerin (CAS 56-81-5)		
Acute		
Oral		
LD50	Rat	12600 mg/kg
Skin corrosion/irritation	Causes skin irritation.	
Serious eye damage/eye irritation	Causes serious eye damage.	
Respiratory or skin sensitization	n	
Respiratory sensitization	Not a respiratory sensitizer.	
Skin sensitization	This product is not expected to caus	e skin sensitization.
Germ cell mutagenicity	No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.	
Carcinogenicity	Not classifiable as to carcinogenicity to humans.	
IARC Monographs. Overall Not listed. NTP Report on Carcinogens Not listed.	Evaluation of Carcinogenicity	
OSHA Specifically Regulate	ed Substances (29 CFR 1910.1001-10	53)
Not listed.		
Reproductive toxicity	This product is not expected to cause reproductive or developmental effects.	
Specific target organ toxicity - single exposure	Not classified.	
Specific target organ toxicity - repeated exposure	Not classified.	
Aspiration hazard	Not an aspiration hazard.	
12. Ecological information	ı	
Ecotoxicity	The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.	

Components		Species	Test Results		
Glycerin (CAS 56-81-5)					
Aquatic					
Crustacea	EC50	Crustacea	> 10000 mg/l, 24 Hours		
Persistence and degradability	Material is readily degradable and undergoes hydrolysis in several hours.				
Bioaccumulative potential	No data available.				
<b>Partition coefficient n-octa</b> Glycerin (CAS 56-81-5) Lactic acid (CAS 50-21-5)	anol / water (log Kow) -1.76 -0.72				
Mobility in soil	No data available.				
Other adverse effects	None known.				
13. Disposal considerations					
Disposal instructions	Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Dispose of contents/container in accordance with local/regional/national/international regulations.				
Local disposal regulations	Dispose in accordance with all applicable regulations.				
Hazardous waste code	The waste code should be assigned in discussion between the user, the producer and the waste				

Waste from residues / unused<br/>productsDispose in accordance with local regulations. Empty containers or liners may retain some product<br/>residues. This material and its container must be disposed of in a safe manner.Contaminated packagingEmpty containers should be taken to an approved waste handling site for recycling or disposal.

**inated packaging** Empty containers should be taken to an approved waste handling site for recycling or disposal. Since emptied containers may retain product residue, follow label warnings even after container is emptied.

## 14. Transport information

#### DOT

Not regulated as dangerous goods.

#### ΙΑΤΑ

Not regulated as dangerous goods.

#### IMDG

Not regulated as dangerous goods.

Transport in bulk according to Not established. Annex II of MARPOL 73/78 and the IBC Code

## 15. Regulatory information

US federal regulations	This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.				
TSCA Section 12(b) Exp	port Notification (40 C	FR 707, Subpt. D)			
Not regulated.					
CERCLA Hazardous Su	bstance List (40 CFR	302.4)			
Not listed.					
SARA 304 Emergency r	elease notification				
Not regulated.					
OSHA Specifically Reg	ulated Substances (29	9 CFR 1910.1001-1053)			
Not listed.					
Toxic Substances Control Act (TSCA)		All components of the mixture on the TSCA 8(b) inventory are designated "active".			
Superfund Amendments and Reauthorization Act of 1986 (SARA)					
SARA 302 Extremely hazard	dous substance				
Not listed.					
SARA 311/312 Hazardous chemical	Yes				
Classified hazard categories	Skin corrosion or irritation Serious eye damage or eye irritation				

Not regulated.

#### Other federal regulations

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

Not regulated.

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Not regulated.

Safe Drinking Water Act Not regulated.

## (SDWA)

## FEMA Priority Substances Respiratory Health and Safety in the Flavor Manufacturing Workplace

Other Flavoring Substances with OSHA PEL's

#### **US** state regulations

US. Massachusetts RTK - Substance List

Glycerin (CAS 56-81-5)

Glycerin (CAS 56-81-5)

## US. New Jersey Worker and Community Right-to-Know Act

Glycerin (CAS 56-81-5)

## US. Pennsylvania Worker and Community Right-to-Know Law

Glycerin (CAS 56-81-5)

#### US. Rhode Island RTK

Glycerin (CAS 56-81-5)

#### California Proposition 65

California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65): This material is not known to contain any chemicals currently listed as carcinogens or reproductive toxins. For more information go to www.P65Warnings.ca.gov.

#### **International Inventories**

Country(s) or region	Inventory name On in	ventory (yes/no)*		
Australia	Australian Inventory of Industrial Chemicals (AICIS)	Yes		
Canada	Domestic Substances List (DSL)	Yes		
Canada	Non-Domestic Substances List (NDSL)	Yes		
China	Inventory of Existing Chemical Substances in China (IECSC)	Yes		
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	Yes		
Europe	European List of Notified Chemical Substances (ELINCS)	No		
Japan	Inventory of Existing and New Chemical Substances (ENCS)	Yes		
Korea	Existing Chemicals List (ECL)	Yes		
New Zealand	New Zealand Inventory	Yes		
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	Yes		
Taiwan	Taiwan Chemical Substance Inventory (TCSI)	No		
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes		
*A "Vea" indicates that all components of this product comply with the inventory requirements administered by the covering country (a)				

\*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s) A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

## 16. Other information, including date of preparation or last revision

Issue date	12-October-2015			
Revision date	24-October-2021			
Version #	02			
Further information	HMIS® is a registered trade and service mark of the American Coatings Association (ACA).			
HMIS® ratings	Health: 3 Flammability: 1 Physical hazard: 0 Personal protection: B			



Disclaimer

Regenesis cannot anticipate all conditions under which this information and its product, or the products of other manufacturers in combination with its product, may be used. It is the user's responsibility to ensure safe conditions for handling, storage and disposal of the product, and to assume liability for loss, injury, damage or expense due to improper use. The information in the sheet was written based on the best knowledge and experience currently available.