AMID BIOSCIENCES

KRAS G12C Protein, Human, Recombinant

Prepared according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations
Revision date:08/19/2020 Version: 04

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1 Product Identifier

Product name	KRAS G12C Protein, Human, Recombinant
Product form	Aqueous and glycerol solution
Product #	KRAS12C-301

9.1 Relevant identified uses of the substance or mixture and uses advised against

Use of the substance/mixture:	Laboratory reagent for *in vitro* research use only

1.3 Details of the supplier of the safety data sheet

Amid Biosciences LLC
3108 Patrick Henry Drive
Santa Clara, CA 95054 USA
Phone: 1-650-237-0558
E-mail: info@amidbiosciences.com

1.4 Emergency telephone number: 1-650-237-0558 (Amid Biosciences: Monday-Friday, 8:00 AM-5:00 PM

SECTION 2: Hazards Identification

2.1 Classification of the substance or mixture	
2.2 Classification (GHS-US)	Not classified
2.3 Label elements	
GHS-US labeling	No labeling applicable
2.4 Other hazards	
Other hazards not contributing to the classification:	None under normal conditions
2.5 Unknown acute toxicity (GHS-US)	No data available

SECTION 3: Composition/information on ingredients

3.1 Substance

KRAS G12C, Human, Recombinant in aqueous and glycerol solution

3.2 Mixture

Name	Product Identifier	%
Glycerol, CAS# 56-81-5 Contains no other hazardous ingredients at levels requiring disclosure by the OSHA Hazard Communication Standard (29 CFR 1910.1200).	Ingredient in product	1 - 50

SECTION 4: First aid measures

4.1 Description of first aid measures:	never give anything by mouth to an unconscious person. If
First-aid measures general:	you feel unwell, seek medical advice (show the label where possible).
First-aid measures after inhalation:	remove to fresh air and keep at rest in a position comfortable for breathing.
First-aid measures after skin contact:	IF ON SKIN (or clothing), remove affected clothing and wash all exposed skin with water for at least 15 minutes. If irritation persists, call a physician.
First-aid measures after eye contact:	IF IN EYES: Immediately flush with plenty of water for at least 15 minutes. Obtain medical attention if pain, blinking or redness persists.
First-aid measures after ingestion:	IF SWALLOWED: Immediately give large amounts of water. Do NOT induce vomiting.

4.2 Most important symptoms and effects, both acute and delayed

Symptoms/injuries:	Not expected to present a significant hazard under anticipated conditions of normal use.
Symptoms/injuries after inhalation:	May cause respiratory irritation.
Symptoms/injuries after skin contact:	May cause skin irritation.
Symptoms/injuries after eye contact:	May cause slight temporary irritation.
Symptoms/injuries after ingestion:	May cause gastrointestinal irritation.
Chronic symptoms:	No data available.

4.3 Indication of any immediate medical attention and special treatment needed
No additional information available

SECTION 5: Firefighting measures

5.1 Extinguishing media
Suitable extinguishing media: Foam. Dry powder. Carbon dioxide. Water spray.

5.2 Special hazards arising from the substance or mixture

Fire hazard:	Product is not flammable.
Explosion hazard:	Product is not explosive.
Reactivity:	No dangerous reactions known under normal conditions of use.

5.3. Advice for firefighters

Firefighting instructions:	Use water spray or fog for cooling exposed containers.
Protection during firefighting:	Exercise caution when fighting any chemical fire.
General measures:	Do not dispose of fire-fighting water in the environment.
Protection during firefighting:	Do not enter fire area without proper protective equipment, Including respiratory protection.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures
General measures: No specific emergency measures are required other than good. Laboratory hygiene and safety practices.

6.1.1 For non-emergency personnel
Protective equipment: Wear Protective equipment as described in Section 8.
Emergency procedures: Evacuate unnecessary personnel.

6.1.2 For emergency responders
Protective equipment: Wear suitable protective clothing, gloves and eye or face protection. Approved supplied-air respirator, in case of emergency.

6.2 Environmental precautions
Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters. Avoid release to the environment.

6.3 Methods and material for containment and cleaning up

For containment:	Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams.
Methods for cleaning up:	Take up liquid spill into inert absorbent material, e.g.: sand, earth, vermiculite. Sweep or shovel spills into appropriate container for disposal. This material and its container must be disposed of in a safe way, and as per local legislation.

6.4 Reference to other sections
No additional information available

SECTION 7: Handling and storage

7.1 Precautions for safe handling:
Precautions for safe handling: Wash hands and other exposed areas with mild soap and

water before eating, drinking or smoking and when leaving work.

7.2 Conditions for safe storage, including any incompatibilities
Storage conditions: Keep container tightly closed in a cool, dry, and well-ventilated place.

7.3 Specific end use(s)
No additional information available

SECTION 8: Exposure controls/personal protection

8.1 Control parameters
Glycerol (CAS# 56-81-5): 10 mg/m^3 based on USA. ACGIH Threshold Limit Values (TLV).

8.2 Exposure controls
Appropriate engineering controls: Ensure adequate ventilation, especially in confined areas.
Personal protective equipment: Gloves. Protective goggles.
Hand protection: Use gloves chemically resistant to this material when prolonged or repeated contact could occur. Gloves should be classified under Standard EN 374 or ASTM F1296. Suggested glove materials are: Natural rubber (“latex”), Neoprene, Nitrile/butadiene rubber, Polyethylene, Ethyl vinyl alcohol Laminate, PVC or vinyl.
Eye protection: Chemical goggles or safety glasses.
Skin and body protection: Wear suitable protective clothing. Wear long sleeves.
Eye protection: Chemical goggles or safety glasses.
Skin and body protection: Wear suitable protective clothing. Wear long sleeves.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties of pure Glycerol. Information on mixture not available.

Physical state:	Viscous Liquid
Color:	Clear, colorless
Odor:	Odorless
Odor Threshold:	No data available
pH:	6.5 (1o g/l as aqueous solution at 25^{o}C)
Relative evaporation rate (butyl acetate=1):	No data available
Melting point:	No data available
Freezing point:	No data available
Boiling point:	No data available
Flash point:	No data available
Auto-ignition temperature:	No data available
Decomposition temperature:	No data available
Flammability (solid, gas):	No data available
Vapor pressure:	No data available
Relative vapor density at 20 °C:	No data available
Relative density:	No data available
Solubility in water:	Soluble
Log Pow:	No data available
Log Kow:	No data available
Viscosity, kinematic:	No data available
Viscosity, dynamic:	No data available
Explosive properties:	No data available
Oxidizing properties:	No data available
Explosive limits:	No data available

9.2 Other information
No additional information available

SECTION 10: Stability and reactivity

10.1 Reactivity
No dangerous reactions known under normal conditions of use.
10.2 Chemical stability
Stable under recommended handling and storage conditions (see section 7).
10.3 Possibility of hazardous reactions

None known.

10.4 Conditions to avoid

None known.

10.5 Incompatible materials

Strong oxidizing agents. Strong bases.

10.6 Hazardous decomposition products

Thermal decomposition generates: Carbon oxides (CO, CO_2)

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity:	No data available
Skin corrosion/irritation:	No data available
Serious eye damage/irritation:	No data available
Respiratory or skin sensitization:	No data available
Germ cell mutagenicity:	No data available
Carcinogenicity:	No data available
Reproductive toxicity:	No data available
Specific target organ toxicity (single exposure):	No data available
Specific target organ toxicity (repeated exposure):	No data available
Aspiration hazard:	No data available
Symptoms/injuries after inhalation:	No data available
Symptoms/injuries after skin contact:	No data available
Symptoms/injuries after eye contact:	No data available
Symptoms/injuries after ingestion:	No data available
Chronic symptoms:	No data available

SECTION 12: Ecological information

12.1 Toxicity

No additional information available

12.2 Persistence and degradability

Persistence and degradability: Not established

12.3 Bioaccumulative potential

No additional information available

12.4 Mobility in soil

No additional information available

12.5 Other adverse effects

No additional information available

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Waste treatment methods: Do not discharge to public wastewater systems without permit of pollution control authorities. No discharge to surface waters is allowed without an NPDES permit.

Waste disposal recommendations: Dispose in a safe manner in accordance with local/national regulations.

SECTION 14: Transport information

In accordance with DOT, IATA, IMO, RID/ADR:

Not hazardous for transport

Additional information

Other information: No supplementary information available

Transport by sea

No additional information available

Air transport

No additional information available

SECTION 15: Regulatory information

15.1 US Federal regulations **Glycerol, CAS# 56-81-5**	This chemical substance in this product is listed in the EPA (Environmental Protection Agency) TSCA (Toxic Substances C
15.2 International regulations **CANADA**	CAS# 56-81-5 is listed on Canada's DSL List. No additional information available.
EUROPEAN REGULATIONS European Labeling in accordance with EC Regulations: Hazard Symbols: Risk Phrases: Safety Phrases:	 None None 24/25, Avoid contact with skin and eyes.
15.3 US State regulations **California Proposition 65**	This product does not contain any substances known to the state of California to cause cancer and/or reproductive harm
Glycerol (56-81-5) U.S. - Massachusetts U.S. - New Jersey U.S. - Pennsylvania	 Right To Know List Right to Know Hazardous Substance List RTK (Right to Know) List

SECTION 16: Other information

Indication of changes:	Revision 1.0: New MSDS Created.
Revision date:	08/19/2020
Other information:	None
NFPA health hazard:	0 - Exposure under fire conditions would offer no hazard beyond that of ordinary combustible materials.
NFPA fire hazard:	0 - Materials that will not burn.
NFPA reactivity:	0 - Normally stable, even under fire exposure conditions, and are not reactive with water.

HMIS III Rating

Health:	0
Flammability:	0
Physical:	0

This information is disclosed to the best of Amid Biosciences' knowledge. This document does not constitute a contractual relationship with product end users or handlers with respect to the possible presence of hazards in this item. Disposal should be in accordance with applicable regional, national and local laws and regulations.