Conforms to HCS 2021 – United States

# **SAFETY DATA SHEET**



# Section 1: Identification

GHS product identifier	Part number	Other means of identification
IGH FR1 - 6FAM	A1010011	<i>IGH</i> FR1 - 6FAM
IGH FR2 - Unlabeled	A1010020	<i>IGH</i> FR2 - Unlabeled
IGH FR3 - Unlabeled	A1010030	<i>IGH</i> FR3 - Unlabeled
IGH FR3 - HEX	A1010031	<i>IGH</i> FR3 - HEX
IGH DH1-6 - HEX	A1010041	IGH DH1-6 - HEX
IGH DH7 - 6FAM	A1010051	IGH DH7 - 6FAM
IGH Framework 1 - 6FAM	A1010061	IGH Framework 1 - 6FAM
IGH Framework 2 - Unlabeled	A1010070	IGH Framework 2 - Unlabeled
IGH Framework 3 - Unlabeled	A1010080	IGH Framework 3 - Unlabeled
IGH Framework 3 - HEX	A1010081	IGH Framework 3 - HEX
IGH Framework 2 - 6FAM	A1010091	<i>IGH</i> Framework 2 - 6FAM
IGH FR2 - 6FAM	A1010101	<i>IGH</i> FR2 - 6FAM
IGK V-J - Unlabeled	A1020010	IGK V-J - Unlabeled
IGK V-J - 6FAM	A1020011	<i>IGK</i> V-J - 6FAM
IGK V-Kde - Unlabeled	A1020020	<i>IGK</i> V-Kde - Unlabeled
IGK V-Kde - 6FAM	A1020021	<i>IGK</i> V-Kde - 6FAM
IGL V-J - 6FAM	A1030011	<i>IGL</i> V-J - 6FAM
TCRB V-J1+2 - Unlabeled	A2050010	TCRB V-J1+2 - Unlabeled
TCRB V-J1+2 - 6FAM & HEX	A2050011	<i>TCRB</i> V-J1+2 - 6FAM & HEX
TCRB V-J2 - Unlabeled	A2050020	TCRB V-J2 - Unlabeled
TCRB V-J2 - 6FAM	A2050021	TCRB V-J2 - 6FAM
TCRB D-J1+2 - 6FAM & HEX	A2050031	TCRB D-J1+2 - 6FAM & HEX
TCRG V(1-8)J - HEX	A2070021	TCRG V(1-8)J - HEX
TCRG V(1-8,9)J - 6FAM	A2070071	<i>TCRG</i> V(1-8,9)J - 6FAM
TCRG V(2-5,8-11)J1+2+P-6FAM	A2070091	TCRG V(2-5,8-11)J1+2+P-6FAM
BCL2/JH Mbr - Unlabeled	A3090050	BCL2/JH Mbr - Unlabeled
BCL2/JH 3'Mbr - Unlabeled	A3090060	BCL2/JH 3'Mbr - Unlabeled
BCL2/JH mcr - Unlabeled	A3090070	BCL2/JH mcr - Unlabeled
Product type	Liquid	

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

Identified uses Analyte Specific Reagent. Analytical and performance characteristics are not established.

**Restrictions on use** : For professional users only.

Supplier's details : Invivoscribe, Inc.

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San Diego, CA 92121 USA

Tel: 1858 224 6000 Toll Free: 1866 623 8105

Email: customerservice@invivoscribe.com

Website: invivoscribe.com

Emergency telephone (with hours of operation) : 1 866 623 8105

### Section 2. Hazards Identification

OSHA/HCS status : While this material is not considered hazardous by the OSHA Hazard Communication

Standard (29 CFR 1910:1200), this SDS contains valuable information critical to the safe handling and proper use of the product. This SDS should be retained and available for

employees and other users of this product.

Classification of the substance or mixture : Not classified.

**GHS label elements** 

Signal word : No signal word.

**Hazard statements** : No known significant effects or critical hazards.

**Precautionary statements** 

Prevention : Not applicable.

Response : Not applicable.

Storage : Not applicable.

Disposal : Not applicable.

Hazards not otherwise classified : None known.

### Section 3. Compositions/information on ingredients

Substance/mixture : Mixture
Other means of identification : Not available.

Ingredient Name	%	CAS Number
Dimethyl Sulfoxide	≥1 - ≤3	67-68-5

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

Occupational exposure limits, if available, are listed in Section 8.

### Section 4. First aid measures

#### Description of necessary first aid measures

Eye contact : Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any

contact lenses. Get medical attention if irritation occurs.

Inhalation : Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if

symptoms occur.

Skin contact : Flush contaminated skin with plenty of water. Get medical attention if symptoms occur.

Ingestion : Wash out mouth with water. If material has been swallowed and the exposed person is conscious, give small

quantities of water to drink. Do not induce vomiting unless directed to do so by medical personnel. Get medical

attention if symptoms occur.

#### Most important symptoms/effects, acute and delayed

### Potential acute health effects

Eye contact:No known significant effects or critical hazards.Inhalation:No known significant effects or critical hazards.Skin contact:No known significant effects or critical hazards.Ingestion:No known significant effects or critical hazards.

Over-exposure signs/symptoms

Eye contact:No known significant effects or critical hazards.Inhalation:No known significant effects or critical hazards.Skin contact:No known significant effects or critical hazards.Ingestion:No known significant effects or critical hazards.

### Section 4. First aid measures

Indication of immediate medical attention and special treatment needed, if necessary

Notes to physician Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been

ingested or inhaled.

Specific treatments No specific treatment.

Protection of first aiders No action shall be taken involving any personal risk or without suitable training.

See toxicological information (Section 11)

### Section 5. Fire-fighting measures

#### Extinguishing media

Suitable extinguishing media

Unsuitable extinguishing media

Specific hazards arising from the chemical

Hazardous thermal decomposition products

Use an extinguishing agent suitable for the surrounding fire.

None known.

In a fire or if heated, a pressure increase will occur and the container may burst.

Decomposition products may include the following materials:

carbon dioxide carbon monoxide sulfur oxides

Special protective actions for fire-fighters

Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving personal risk or without suitable

Special protective equipment for fire-fighters

Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

### Section 6. Accidental release measures

#### Personal precautions, protective equipment and emergency procedures

For non-emergency personnel

No action shall be taken involving any personal risk or without suitable training.

Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not

touch or walk through spilled material. Put on appropriate personal protective equipment.

If specialized clothing is required to deal with the spillage, take note of any information in Section 8 For emergency responders on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

> Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains, and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers,

waterways, soil or air).

#### Methods and materials for containment and cleaning up

**Environmental precautions** 

Small spill Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water soluble.

Alternatively, or if water soluble, absorb with an inert dry material and place in an appropriate waste

disposal container. Dispose of via a licensed waste disposal contractor.

Stop leak if without risk. Move containers from spill area. Prevent entry into sewers, water courses, Large spill

basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Dispose of via a licensed waste disposal contractor. Note: see Section 1 for emergency contact information

and Section 13 for waste disposal.

## Section 7. Handling and storage

#### Precautions for safe handling

Protective measures

Advice on general occupational hygiene

Put on appropriate personal protective equipment (see Section 8). Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. See also Section 8 for additional information on hygiene measures.

Conditions for safe storage, including any incompatibilities

Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.

# Section 8. Exposure to controls/personal protection

#### **Control parameters**

Occupational exposure limits

Ingredient Name	Exposure limits
Dimethyl sulfoxide	AIHA WEEL (United States, 7/2018).
	TWA: 250 ppm 8 hours

Appropriate engineering controls:

Environmental exposure

controls :

Good general ventilation should be sufficient to control worker exposure to airborne contaminants.

Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation.

#### **Individual protection measures**

Hygiene measures

Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location..

Eye/face protection

Safety eyewear complying with an approved standard should be used when a risk assessment indicated this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. In contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: safety glasses with side-shields.

#### Skin protection

Hand protection

Chemical-resistant, impervious gloves complying with and approved standard should be worn at all times when

handling chemical products if a risk assessment indicates this is necessary.

Body protection

Personal protective equipment for the body should be selected based on the task being performed and the

risks involved and should be approved by a specialist before handling this product.

Other skin protection: Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Respiratory protection

Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use.

# Section 9. Physical and chemical properties

<u>Appearance</u>

Physical state : Liquid. [Clear.]

Color : Colorless, light yellow, light pink, light blue or light orange.

Odor Odorless. Odor threshold Not available. pН 7 to 9.5. Melting/freezing point Not available. Initial boiling point and boiling range Not available. Flash point Does not flash. **Evaporation rate** Not available. Flammability (solid, gas) Not available. Lower and upper explosive (flammable) limits Not available. Vapor pressure Not available. Vapor density Not available. Not available.

Vapor density : Not available.
Relative density : Not available.
Solubility : Not available.
Solubility in water : Not available.
Partition coefficient: n-octanol/water : Not applicable.
Auto-ignition temperature : Not available.
Decomposition temperature : Not available.
Viscosity : Not available.

Flow time (ISO 2431) : Not available.

## Section 10. Stability and reactivity

**Reactivity:** No specific test data related to reactivity for this product or its ingredients.

Chemical stability : The product is stable.

Possibility of hazardous reactions : Under normal conditions of storage and use, hazardous reactions will not occur.

Conditions to avoid : No specific data.

**Incompatible materials** : Reactive or incompatible with the following materials: oxidizing materials.

**Hazardous decomposition products** : Under normal conditions of storage and use, hazardous decomposition products should not be

produced.

# Section 11. Toxicological information

### Information on toxicological effects

**Acute toxicity** 

Product/ingredient name	Result	Species	Dose	Exposure
Dimethyl sulfoxide	LD50 Dermal LD50 Oral	Rat Rat	40000 mg/kg 14500 mg/kg	-

#### Irritation/Corrosion

There is no data available.

### Sensitization

There is no data available.

#### Mutagenicity

There is no data available.

#### Carcinogenicity

There is no data available.

#### Reproductive toxicity

There is no data available.

## Section 11. Toxicological information

#### **Teratogenicity**

There is no data available.

#### Specific Target organ toxicity (single exposure)

There is no data available.

#### Specific Target organ toxicity (repeated exposure)

There is no data available.

#### Aspiration hazard

There is no data available.

Information on the likely routes of exposure : Routes on entry anticipated: Oral, Dermal, Inhalation.

Potential acute health effects

Eye contact: No known significant effects or critical hazards.Inhalation: No known significant effects or critical hazards.Skin contact: No known significant effects or critical hazards.Ingestion: No known significant effects or critical hazards.

#### Symptoms related to the physical, chemical and toxicological characteristics

Eye contact: No known significant effects or critical hazards.Inhalation: No known significant effects or critical hazards.Skin contact: No known significant effects or critical hazards.Ingestion: No known significant effects or critical hazards.

### Delayed and immediate effects and also chronic effects from short and long term exposure

Short term exposure

Potential immediate effects : No known significant effects or critical hazards.

Potential delayed effects : No known significant effects or critical hazards.

Long term exposure

Potential immediate effects : No known significant effects or critical hazards.

Potential delayed effects : No known significant effects or critical hazards.

Potential chronic health effects
General

General: No known significant effects or critical hazards.Carcinogenicity: No known significant effects or critical hazards.Mutagenicity: No known significant effects or critical hazards.Reproductive toxicity: No known significant effects or critical hazards.

Numerical measures of toxicity

Acute toxicity estimates

Product/ingredient name	Oral (mg/kg)	Dermal (mg/kg)	Inhalation (gases) (ppm)	Inhalation (vapors) (mg/l)	Inhalation (dusts and mists) (mg/l)
Dimethyl sulfoxide	14500	40000	N/A	N/A	N/A

# Section 12. Ecological information

#### **Toxicity**

Product/ingredient name	Result	Species	Exposure
Dimethyl sulfoxide Acute EC50 18299 µg/L Marine water		Algae – Nitzschia pungens	96 hour
	Acute LC50 37.437 mg/L Marine water	Crustaceans – Artemia sp.	48 hours
	Acute LC50 25000 ppm Fresh water	Daphnie – Daphnia magna – Neonate	48 hours
	Acute LC50 34000000 μg/L Fresh water Chronic NOEC 3323 μg/L Marine water	Fish — Pimephales promelas Algea — Nitzschia pungens	96 hours 96 hours
	Chronic NOEC 100 μl/L Fresh water	Daphnia – Daphnia magna – Juvenile (Fledgling, Hatchling, Weanling)	21 days

# Section 12. Ecological information

#### Persistence and degradability

There is no data available.

#### Bioaccumulative potential

Product/ingredient name	LogP	BCF	Potential
Dimethyl sulfoxide	-1.35	3.16	low

#### Mobility in soil

Soil/water partition coefficient (Koc) : Not available.

Other adverse effects : No known significant effects or critical hazards.

### Section 13. Disposal considerations

Disposal methods

The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solution and any by-products should comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Section 14. Transport information				
	DOT Classification	IMDG	IATA	
UN number	Not regulated.	Not regulated.	Not regulated.	
UN proper shipping name	-	-	-	
Transport hazard class(es)	-	-	-	
Packing group	-	-	-	
Environmental Hazards	No.	No.	No.	

**AERG**: Not applicable

Special precautions for user

**Transport within user's premises:** always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

Transportation in bulk according to IMO instruments : Not available.

# Section 15. Regulatory information

U.S. Federal regulations : TSCA 8(a) CDR Exempt/Partial exemption: Not determined.

Clean Water Act (CWA) 311: Hydrochloric Acid.

Clean Air Act Section 112 (b) Hazardous Air Pollutants (HAPs) : Listed
Clean Air Act Section 602 Class I Substances : Not listed
Clean Air Act Section 602 Class II Substances : Not listed
DEA List I Chemicals (Precursor Chemicals) : Not listed
DEA List II Chemicals (Essential Chemicals) : Not listed

SARA 302/304

Composition/information on ingredients

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Nama	%	EHS	SARA 302 TPQ		SARA 304 RQ	
Name			(lbs)	(gallons)	(lbs)	(gallons)
Hydrochloric acid	≤0.0025	Yes.	500	-	5000	-

SARA 304 RQ : 277831623,1 lbs / 126135556,9 kg

SARA 311/312

Classification : Not applicable.

Composition/information on ingredients

No products were found

#### **Analyte Specific Reagents**

# Section 15. Regulatory information

#### State regulations

Massachusetts: None of the components are listed.New York: None of the components are listed.

New Jersey : The components are listed: Dimethyl sulfoxide.

Pennsylvania : None of the components are listed.

<u>California Prop. 65</u>

This product does not require a Safe Harbor warning under California Prop. 65.

#### **International regulations**

Chemical Weapon Convention List Schedules I, II & III Chemicals

Not Listed.

**Montreal Protocol** 

Not Listed.

Stockholm Convention on Persistent Organic Pollutants

Not Listed.

Rotterdam Convention on Prior Informed Consent (PIC)

Not Listed.

**UNECE Aarhus Protocol on POPs and Heavy Metals** 

Not Listed.

**Inventory list** 

United States (TSCA 8b) : All components are active or exempted.

### Section 16. Other information

#### Procedure used to derive the classification

Classification	Justification		
Not classified.			

### <u>History</u>

Date of issue/Date of revision : 4/15/2021

Date of previous issue : Not applicable.

Version : 1 Internal code : 651-005

Prepared by : Invivoscribe, Inc..

**Key to abbreviations** : ATE = Acute Toxicity Estimate

BCF = Bioconcentration Factor

GHS = Globally Harmonized System of Classification and Labelling of Chemicals

IATA = International Air Transport Association

IBC = Intermediate Bulk Container

IMGD = International Maritime Dangerous Goods

LogPow = logarithm of the octanol/water portion coefficient

MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the

Protocol of 1978 ("Marpol" = maritime pollution)

N/A = Not available SGG = Segregation Group UN = United Nations

#### Notice to reader

To the best of our knowledge, the information contained herein is accurate. However, neither the above-named supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein.

Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.