SAFETY DATA SHEET

This safety data sheet complies with the requirements of:
Regulation (EC) No. 1907/2006 and Regulation (EC) No. 1272/2008

Product Name Sigma 70 Master Mix - Bulk
Product Number 507005, 507025, 507099
Kit Components Sigma 70 Master Mix

Section 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1. Product identifier

Kit Component Name Sigma 70 Master Mix
Product Number n/a

1.2. Relevant identified uses of the substance or mixture and uses advised against

Recommended use For research use only
Uses advised against No information available

1.3. Details of the supplier of the safety data sheet

Supplier Address Daicel Arbor Biosciences
5840 Interface Drive, Suite 101
Ann Arbor, MI 48103
USA
Email info@arbor.daicel.com
Phone + 1 (734) 998-0751

1.4. Emergency telephone number

Emergency Phone Number +1 (800) 222-1222 (American Association of Poison Control Centers)
Available 24 hours everyday

Section 2: HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

Regulation (EC) No 1272/2008

There is no harmonized classification and there are no notified hazards by manufacturers, importers or downstream users for this product.

Section 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances

Sigma 70 Master Mix is a mixture of hazardous substances and non-hazardous substances. The exact concentration percentages of those substances may be withheld as a Daicel Arbor Bioscience trade secret.

Chemical name	EC No	CAS No	Weight %	Classification according to Regulation (EC) No. 1272/2008 [CLP]	REACH STATUS
Tris base	201-064-4	77-86-1	1-5	n/a	01-2119957659-16-0000
Potassium acetate	204-822-2	127-08-2	1-5	n/a	01-2119486975-16-0000
Magnesium acetate	205-554-9	142-72-3	1-5	n/a	01-2119991992-18-0000
Substance 1-31	n/a	Trade Secret	85-97	n/a	n/a

There are no 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.

Section 4: FIRST AID MEASURES

4.1. Description of first aid measures

General Advice
In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible). Remove from exposure, lie down. Do not breathe dust/fume/gas/mist/vapors/spray.

Inhalation Remove to fresh air. If breathing is difficult, give oxygen. Get medical attention immediately if symptoms occur.

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Eye Contact Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids. Consult a physician.

Skin Contact Wash skin with soap and water.

Ingestion Clean mouth with water and drink afterwards plenty of water.

4.2. Most important symptoms and effects, both acute and delayed

Symptoms No information available.

4.3. Indication of any immediate medical attention and special treatment needed

Note to Physician Treat symptomatically.

Section 5: FIRE-FIGHTING MEASURES

5.1. Extinguishing media

Suitable Extinguishing Media Substance is non-flammable. Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable Extinguishing Media CAUTION: Use of water spray when fighting fire may be inefficient.

5.2. Special hazards arising from the substance or mixture

Specific Hazards Arising from the Chemical Thermal decomposition can lead to release of irritating gases and vapors.

5.3. Advice for firefighters

Special protective equipment for fire-fighters Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear. Use personal protection equipment.

Section 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

Personal Precautions Ensure adequate ventilation, especially in confined areas. Avoid contact with skin, eyes, and clothing.

For emergency responders Use personal protection recommended in Section 8.

6.2. Environmental precautions

Environmental Precautions Should not be released into the environment.

6.3. Methods and material for containment and cleaning up

Methods for Containment Prevent further leakage or spillage if safe to do so.

Methods for Cleaning Up Soak up with inert absorbent material. Pick up and transfer to properly labeled containers. This material and its container must be disposed of as hazardous waste.

6.4. Reference to other sections

Reference to other sections See section 8 for more information. See section 13 for more information.

Section 7: HANDLING AND STORAGE

7.1. Precautions for safe handling

Advice on Safe Handling Handle in accordance with good industrial hygiene and safety practice.

7.2. Conditions for safe storage, including any incompatibilities

Storage Temperature Refer to the current version of the myTXTL Handbook available at www.arborbiosci.com for specific information.

Storage Conditions Keep/store only in original container. Keep tightly closed in a dry and cool place.

Incompatible Materials None known based on information supplied.

7.3. Specific end use(s)

Risk Management Methods (RMM) The information required is contained in this Safety Data Sheet.

Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters

Exposure Limits This product, as supplied, does not contain any hazardous materials with occupational exposure limits established by the region-specific regulatory bodies

Derived No Effect Level (DNEL) No information available.

Predicted No Effect Concentration (PNEC)	No information available.

8.2. Exposure controls

Engineering Controls	Ensure adequate ventilation, especially in confined areas. Ensure that eyewash stations are close to the workstation location. Ensure that showers are close to the workstation location.

Personal protective equipment (PPE)

Eye/face Protection	Wear safety glasses with side shields (or goggles).
Skin and Body Protection	Wear suitable protective clothing and gloves.
Respiratory Protection	Use in well ventilated areas.
General Hygiene Considerations	Handle in accordance with good industrial hygiene and safety practice.

Section 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

Physical State	Liquid
Appearance	Colorless
Oder	Odorless

Property	**Values**	**Remarks / Method**
pH	8.0	at 20 °C (68 °F)
Melting Point/Freezing Point	No information available	
Boiling Point/Boiling Range	100 °C (212 °F)	
Flash Point	Not applicable	
Evaporation Rate	No information available	
Flammability (solid, gas)	Not applicable	
Flammability Limit in Air	Not applicable	
Upper Flammability Limit	Not applicable	
Lower Flammability Limit	Not applicable	
Vapor Pressure	No information available	
Vapor Density	No information available	
Relative Density	No information available	
Specific Gravity	No information available	
Water solubility	No information available	
Solubility in Other Solvents	No information available	
Partition Coefficient	No information available	
Autoignition Temperature	-	Product is not self-igniting
Decomposition Temperature	No information available	
Kinematic Viscosity	No information available	
Dynamic Viscosity	No information available	
Explosive Properties	-	Not explosive
Oxidizing Properties	-	Not oxidizing

9.2. Other information

Softening Point	No information available
Molecular Weight	Not applicable
VOC Content (%)	Not applicable
Density	Not applicable
Bulk Density	No information available

Section 10: STABILITY AND REACTIVITY

10.1. Reactivity

Reactivity No data available.

10.2. Chemical stability

Stability Stable under Normal Conditions.

10.3. Possibility of hazardous reactions

Possibility of Hazardous Reactions Non under normal processing.

10.4. Conditions to avoid

Conditions to Avoid Incompatible materials. Ignition sources. Heat. Exposure to air or moisture over prolonged periods.

10.5. Incompatible materials

Incompatible Materials Strong Oxidizing Agents.

10.6. Hazardous decomposition products

Hazardous Decomposition Products None known

Section 11: TOXILOGICAL INFORMATION

11.1. Information on toxicological effects

Product Information

Product does not present an acute toxicity hazard based on known or supplied information.

Information on toxicological effects

Inhalation Avoid breathing vapors or mists. May cause irritation of respiratory tract.

Eye Contact Redness. May cause slight irritation.

Skin Contact Prolonged contact may cause redness and irritation. Repeated exposure may cause skin dryness or cracking.

Ingestion May cause drowsiness or dizziness. Ingestion causes burns of the upper digestive and respiratory tracts. Symptoms include burning sensation, coughing, wheezing, shortness of breath, headache, nausea, and vomiting.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Skin Corrosion/Irritation	Mild
Serious Eye Damage/Eye Irritation	Mild
Irritation	Mild
Corrosivity	Mild
Respiratory or skin sensitization	No information available
Germ Cell Mutagenicity	No information available
Carcinogenicity	No information available

Reproductive Toxicity	No information available
STOT - Single Exposure	No information available
STOT - Repeated Exposure	No information available
Aspiration Hazard	No information available

Section 12: ECOLOGICAL INFORMATION

12.1. Toxicity

Ecotoxicity (aquatic and terrestrial) Do not empty into drains.

12.2. Persistence and degradability

Persistence and Degradability No information available

12.3. Bioaccumulative potential

Bioaccumulative Potential No information available

12.4. Mobility in soil

Mobility in Soil No information available

12.5. Results of PBT and vPvB assessment

PBT and vPvB assessment No information available

12.6. Other adverse effects

Other Adverse Effects *Ozone depletion potential (ODP)*
No information available

Section 13: DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods

Relevant Information Keep out of drains, sewers, ditches and waterways.

Disposal Considerations Use a licensed professional waste disposal service to dispose of this product. Product may be dissolved in a combustible solvent or absorbed onto a combustible material and burned by a chemical incinerator.

Contaminated Packaging Empty containers must be tripled rinsed prior to disposal.

Section 14: TRANSPORT INFORMATION

IMDG

14.1 UN/ID no	Not regulated
14.2 Proper shipping name	Not regulated
14.3 Hazard Class	Not regulated
14.4 Packing Group	Not regulated
14.5 Marine pollutant	Not applicable
14.6 Special Provisions	None

RID

14.1 UN/ID no	Not regulated
14.2 Proper shipping name	Not regulated
14.3 Hazard Class	Not regulated
14.4 Packing Group	Not regulated
14.5 Environmental hazard	Not applicable
14.6 Special Provisions	None

ADR

14.1 UN/ID no	Not regulated
14.2 Proper shipping name	Not regulated
14.3 Hazard Class	Not regulated
14.4 Packing Group	Not regulated
14.5 Environmental hazard	Not applicable
14.6 Special Provisions	None

IATA **Not regulated**

14.1 UN/ID no	Not regulated
14.2 Proper shipping name	Not regulated
14.3 Hazard Class	Not regulated
14.4 Packing Group	Not regulated
14.5 Environmental hazard	Not applicable
14.6 Special Provisions	None

Section 15: REGULATORY INFORMATION

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

European Union

Take note of Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work

Authorizations and/or restrictions on use:

This product does not contain substances subject to authorization (Regulation (EC) No. 1907/2006 (REACH), Annex XIV)
This product does not contain substances subject to restriction (Regulation (EC) No. 1907/2006 (REACH), Annex XVII)

Persistent Organic Pollutants Not applicable

Ozone-depleting substances (ODS) regulation (EC) 1005/2009 Not applicable

International Inventories

TSCA	Complies
DSL	Complies
NDSL	Complies

Legend
TSCA - United States Toxic Substances Control Act Section 8(b) Inventory
DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

15.2. Chemical safety assessment

Chemical Safety Report No information available

Canada
This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the SDS contains all the information required by the CPR.

Canadian NPRI	Not Listed
WHIMIS (Canada)	Not Classified

Section 16: OTHER INFORMATION

Training advice
Chemical hazard awareness training, incorporating labelling, Safety Data Sheets (SDS), Personal Protective Equipment (PPE) and hygiene.

Prepared by	Daicel Arbor Biosciences +1 (734) 998-0751
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Version	02

Revision Note SDS is valid three (3) years from revision date. Contact info@arbor.daicel.com for latest revision.

This material safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006

Disclaimer
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End of Safety Data Sheet