SAFETY DATA SHEET

Preparation Date March 2, 2016 **Revision Date** May 11, 2017 **Revision Number** 2

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

Product Identifier

Product Name **Basic Yellow 40 Powder**

Other means of identification

Product Code PF15013
CAS Number 29556-33-0
Formula $C_{22}H_{24}N_3O_2Cl$
Synonyms 1H-Benzimidazolium, 2-(7-(Diethylamino)-2-Oxo-2H-1-Benzopyran-3-Yl)-1,3-Dimethyl-Chloride; Coumarin 40; C.I. Basic Yellow 40

Recommended use of the chemical and restrictions on use

Recommended Use For manufacturing, industrial, and laboratory use only.
Uses advised against Not for food, drug, or household use.

Details of the supplier of the safety data sheet

Supplier
Pioneer Forensics, LLC
4621 Technology Drive
Golden, CO 80403
Phone: (303) 762-0800

Emergency Telephone Number(s)

For health emergency, call poison control: (800) 222-1222.

2. HAZARDS IDENTIFICATION

Classification

Acute Toxicity - Oral	Category 4
Serious eye damage/eye irritation	Category 2

Label elements

Emergency Overview

Signal Word
Warning

Hazard statements
Harmful if swallowed
Causes serious eye irritation



Appearance	Physical State	Odor
Fluorescent Yellow Powder	Solid	No information available

Precautionary Statements - Prevention
Wash face, hands and any exposed skin thoroughly after handling
Do not eat, drink or smoke when using this product
Wear eye/face protection

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
If eye irritation persists: Get medical advice/attention
IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell
Rinse mouth

Precautionary Statements - Disposal
Dispose of contents/container to an approved waste disposal plant

Hazards not otherwise classified (HNOC)

None known

Other Information

100 % of the mixture consists of ingredient(s) of unknown toxicity

3. COMPOSITION/INFORMATION ON INGREDIENTS

Synonyms 1H-Benzimidazolium, 2-(7-(Diethylamino)-2-Oxo-2H-1-Benzopyran-3-Yl)-1,3-Dimethyl-, Chloride; Coumarin 40; C.I. Basic Yellow 40

Formula C22H24N3O2.Cl

Chemical Name	CAS-No	Weight %	North American Hazard Indicator
Basic Yellow 40	29556-33-0	100	False

4. FIRST AID MEASURES

First Aid Measures

General Advice Show this safety data sheet to the doctor in attendance.

Eye Contact Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Consult a physician.

Skin Contact Wash off immediately with soap and plenty of water removing all contaminated clothes and shoes. Consult a physician.

Inhalation Move to fresh air. If breathing is difficult, give oxygen. Consult a physician.

Ingestion Rinse mouth. Never give anything by mouth to an unconscious person. Consult a physician.

Protection of First-aiders Use personal protective equipment. Avoid contact with skin, eyes and clothing.

Most important symptoms and effects, both acute and delayed

Main Symptoms No information available.

Indication of any immediate medical attention and special treatment needed

Notes to Physician Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable Extinguishing Media No information available.

Hazardous Combustion Products Thermal decomposition or combustion may produce hazardous gases and/or materials.

Explosion Data

Sensitivity to mechanical impact Not available.
Sensitivity to static discharge Not available.

Specific Hazards Arising from the Chemical
Keep product and empty container away from heat and sources of ignition.

Protective Equipment and Precautions for Firefighters
As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal Precautions Evacuate personnel to safe areas. Ensure adequate ventilation. Use personal protective equipment. Avoid contact with skin, eyes and clothing. In case of insufficient ventilation, wear suitable respiratory equipment.

Environmental Precautions Local authorities should be advised if significant spillages cannot be contained.

Methods and material for containment and cleaning up

Methods for Cleaning up Evacuate personnel to safe areas. Sweep up and shovel into suitable containers for disposal. Avoid dust formation. Clean contaminated surface thoroughly.

7. HANDLING AND STORAGE

Precautions for Safe Handling

Handling Use only in an area equipped with a safety shower. Ensure adequate ventilation. Do not breathe vapours/dust. Avoid contact with skin, eyes and clothing. Avoid repeated exposure.

Conditions for safe storage, including any incompatibilities

Storage Keep containers tightly closed in a dry, cool and well-ventilated place. Keep in properly labelled containers.

Incompatible Materials No information available.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Guidelines This product does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Basic Yellow 40 29556-33-0	-	-	-

Appropriate engineering controls

Engineering Controls Ensure adequate ventilation, especially in confined areas.

Individual protection measures, such as personal protective equipment

Eye/face Protection Tightly fitting safety goggles.

Skin and body protection Impervious gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching the glove's outer surface) to avoid skin contact with this product. The type of protective equipment must be selected according to the concentration and amount of dangerous substance at the specific workplace.

Respiratory Protection In case of insufficient ventilation, wear suitable respiratory equipment.

General Hygiene Considerations Handle in accordance with good industrial hygiene and safety practice.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Appearance Fluorescent Yellow Powder
Physical State Solid
Odor No information available
Odor Threshold No information available

Property	Values	Remarks • Method
pH	No data available	
Melting/freezing point	No data available	Literary Reference
Boiling Point/Range	No information available	
Flash Point	No data available	No information available

Evaporation Rate	Not available	
Flammability Limits in Air		
upper flammability limit	No information available	
lower flammability limit	Not available	
Vapor Pressure	No information available	
Vapor Density	Not available	
Specific Gravity	No information available	
Water Solubility		
Solubility in other solvents	No information available	
Partition coefficient: n-octanol/water	Not available	
Autoignition temp (°C)	No data available	Estimated
Decomposition temperature	No data available	
Viscosity, kinematic	No information available	
Viscosity, dynamic	Not available	
Explosive Properties	No information available	
Oxidizing Properties	No information available	

Other Information

Softening Point	No information available
Molecular Weight	No information available
VOC Content	No information available
Density	No information available
Bulk Density	No information available

10. STABILITY AND REACTIVITY

Reactivity	Not applicable.
Chemical Stability	Stable under recommended storage conditions
Conditions to Avoid	Heat, flames and sparks.
Incompatible Materials	No information available.
Hazardous Decomposition Products	Carbon monoxide. Carbon dioxide (CO2). Nitrogen oxides (NOx). Hydrogen chloride gas.
Possibility of Hazardous Reactions	None under normal processing

11. TOXICOLOGICAL INFORMATION

Product Information To the best of our knowledge, the complete toxicological properties have not been thoroughly investigated.

Chemical Name	LD50 Oral	LD50 Dermal	LC50 Inhalation
Basic Yellow 40 29556-33-0	-	-	-

The following values are calculated based on chapter 3.1 of the GHS document .

ATEmix (oral) 500 mg/kg

Information on likely routes of exposure

Eyes Contact with eyes may cause irritation. Avoid contact with eyes.

Skin Substance may cause slight skin irritation. Avoid contact with skin.

Inhalation	May cause irritation of the mucous membranes. May cause irritation of respiratory tract.
Ingestion	May be harmful if swallowed.

Information on toxicological effects

Symptoms	No information available.

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

Eye damage/irritation	No information available.
Skin Corrosion/Irritation	No information available.
Sensitization	No information available.
Reproductive Effects	No information available.
Mutagenic Effects	No information available.
Developmental Effects	No information available.
STOT - single exposure	No information available.
STOT - Repeated Exposure	No information available.
Chronic Toxicity	Avoid repeated exposure.
Aspiration Hazard	No information available.

Numerical measures of toxicity - Product Information

Acute Toxicity	100 % of the mixture consists of ingredient(s) of unknown toxicity

12. ECOLOGICAL INFORMATION

Ecotoxicity

There is no known ecological information for this product.

100 % of the mixture consists of components(s) of unknown hazards to the aquatic environment

Persistence / Degradability	No information available.
Bioaccumulation / Accumulation	No information available.
Mobility in Soil	No information available.

13. DISPOSAL CONSIDERATIONS

Waste treatment methods

Waste Disposal Method Contact waste disposal services. Dispose of in accordance with local regulations.

Contaminated Packaging Dispose of in accordance with local regulations. Empty containers should be taken for local recycling, recovery or waste disposal.

14. TRANSPORT INFORMATION

DOT Not regulated

TDG Not regulated

MEX Not regulated

ICAO Not regulated

IATA Not regulated

IMDG/IMO Not regulated

RID Not regulated

ADR Not regulated

ADN Not regulated

15. REGULATORY INFORMATION

International Inventories

U.S.A. (TSCA) Complies
Canada (DSL) Does not Comply
EU (EINECS) Complies
EU (ELINCS) Does not Comply
Japan (ENCS) Does not Comply
China Complies
Korea (KECL) Does not Comply
Philippines (PICCS) Complies
Australia (AICS) Complies

Chemical Name	U.S.A. (TSCA)	Canada (DSL)	EU (EINECS)	EU (ELINCS)
Basic Yellow 40	Present	-	Present	-

Chemical Name	Japan (ENCS)	China	Korea (KECL)	Philippines (PICCS)	Australia (AICS)
Basic Yellow 40	-	Present	-	Present	Present

Federal Regulations

SARA 313
Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

SARA 311/312 Hazardous Categorization

Acute Health Hazard	Yes
Chronic Health Hazard	No
Fire Hazard	No
Sudden Release of Pressure Hazard	No
Reactive Hazard	No

CWA (Clean Water Act)
This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

CERCLA
This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material

State Regulations

California Proposition 65
This product does not contain any Proposition 65 chemicals.

State Right-to-Know
This product does not contain any State Right-to-Know chemicals.

U.S. EPA Label Information

EPA Pesticide Registration Number Not applicable

Canada

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

16. OTHER INFORMATION

NFPA

Health 2 **Flammability** 0 **Instability** 0 **Physical Hazard** 0



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Disclaimer

The information provided on this SDS is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal, and release and is not to be considered as a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process unless specified in the text.

End of SDS