MICHELMAN

SAFETY DATA SHEET

Classification according to the regulation OSHA 29 CFR 1910.1200 HCS 2012

Issuing Date 13-Apr-2017

Revision date 13-Apr-2017

Revision Number 3

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

Product Identifier Product name Product code

DIGIPRIME 680 DP680

(513)793-7766

Recommended use of the chemical and restrictions on useRecommendations on UseIndustrial useUses advised againstNo information available

 Details of the supplier of the safety data sheet

 Manufacturer
 Michelman, Inc.

 9080 Shell Road
 Cincinnati, Ohio 45236

Emergency Telephone Number Emergency Telephone

CHEMTREC: +1-703-741-5970 (INTERNATIONAL) 1-800-424-9300 (NORTH AMERICA)

2. HAZARDS IDENTIFICATION

Classification

OSHA Regulatory Status

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Skin sensitization		Category 1B
Signal word	WARNING	
Hazard statements	May cause an allergic skin reaction	

Symbols/Pictograms



Precautionary Statements - Prevention

Avoid breathing dust/fume/gas/mist/vapors/spray Contaminated work clothing should not be allowed out of the workplace Wear protective gloves

Precautionary Statements - Response

Specific treatment (see supplemental first aid instructions on this label) IF ON SKIN: Wash with plenty of soap and water If skin irritation or rash occurs: Get medical advice/attention Wash contaminated clothing before reuse

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant

Hazards Not Otherwise Classified (HNOC)

Not applicable

OTHER INFORMATION

May be harmful if swallowed Harmful to aquatic life with long lasting effects

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical nature

Primer for digital printing

Formulas are confidential and proprietary. Therefore, a percent range is provided for the concentration of each classified component in this mixture.

Chemical name	CAS No.	Weight-%	GHS Classification
Polyethylenimine		4-10	Acute Tox. 4 (H302) Eye Irrit. 2 (H319) Aquatic Chronic 2 (H411) Skin Sens. 1B (H317)

4. FIRST AID MEASURES

FIRST AID MEASURES

Eye Contact	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. If symptoms persist, call a physician.
Skin contact	Wash off immediately with soap and plenty of water. Consult a physician if necessary.
Inhalation	Remove to fresh air. If symptoms persist, call a physician.
Ingestion	Rinse mouth. If symptoms persist, call a physician.

Most important symptoms and effects, both acute and delayed

Most Important Symptoms and No information available. Effects

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.

Extinguishing media which must not be used for safety reasons None.

Specific hazards arising from the chemical

No information available.

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	Ensure adequate ventilation. Avoid contact with eyes, skin and clothing. Use personal protective equipment as required.
Environmental precautions	Do not allow into any sewer, on the ground or into any body of water. Local authorities should be advised if significant spillages cannot be contained.
Methods for containment	Prevent further leakage or spillage if safe to do so.
Methods for cleaning up	Pick up and transfer to properly labeled containers.

7. HANDLING AND STORAGE

Precautions for safe handling

Handling Handle in accordance with good industrial hygiene and safety practice. Avoid contact with eyes, skin and clothing. Use personal protective equipment as required.

Conditions for safe storage, including any incompatibilities

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

Incompatible Products None known based on information supplied.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

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

Appropriate engineering controls

Engineering Measures	Showers Eyewash stations Ventilation systems.		
Environmental exposure controls	Local authorities should be advised if significant spillages cannot be contained		
Individual protection measures, such as personal protective equipment			
Eye/Face Protection	Tight sealing safety goggles.		
Skin and body protection	Long sleeved clothing. Protective gloves.		
Respiratory protection	No special protective equipment required.		
Hygiene Measures	Handle in accordance with good industrial hygiene and safety practice.		

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

10. STABILITY AND REACTIVITY

<u>Chemical stability</u> Stable under recommended storage conditions.

Possibility of Hazardous Reactions

None under normal processing.

Conditions to avoid

Do not freeze

Incompatible materials

None known based on information supplied.

Hazardous decomposition products

None known based on information supplied.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Product Information

Inhalation	Not an expected route of exposure.
Eye contact	No known effect based on information supplied.
Skin contact	May cause sensitization by skin contact.
Ingestion	No known effect based on information supplied.

Acute toxicity

Component Information

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Polyethylenimine	2200 mg/kg (Rat)	-	-

Information on toxicological effects

```
Symptoms
```

None known.

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

Carcinogenicity	Contains no ingredients above reportable quantities listed as a carcinogen
Irritation	None known based on information supplied.
Sensitization	May cause sensitization by skin contact.
Mutagenic Effects	None known based on information supplied.
Reproductive toxicity	None known based on information supplied.
STOT - single exposure	None known based on information supplied
STOT - repeated exposure	None known based on information supplied.
Aspiration Hazard	None known based on information supplied.

<u>Numerical measures of toxicity - Product Information</u> The following values are calculated based on chapter 3.1 of the GHS document .

ATEmix (oral)	4765 mg/kg
ATEmix (dermal)	100449 mg/kg
ATEmix (inhalation-gas)	234380 mg/l
ATEmix (inhalation-dust/mist)	167.8 mg/l

12. ECOLOGICAL INFORMATION

Ecotoxicity

1.30505 % of the mixture consists of component(s) of unknown hazards to the aquatic environment

Microorganistis Fiea)	Chemical name	Toxicity to Algae	Toxicity to Fish	Toxicity to Microorganisms	Daphnia Magna (Water Flea)
-----------------------	---------------	-------------------	------------------	-------------------------------	-------------------------------

Polyethylenimine		LC50 96 7.1 mg/L	EC20 0.5hr 60 mg/L	EC50 48 8.84 mg/L	
Persistence and degradability Persistence and degradability is not known based on information supplied.					
<u>Mobility</u>	The mobility	The mobility of this product has not been determined			
ioaccumulation Bioaccumulation potential is not known based on information supplied					
Other adverse effects					
Endocrine system	m This product does not contain any known or suspected endocrine disruptors				
	13. DIS	POSAL CONSIDERA	TIONS		
Waste treatment methods	13. DIS	POSAL CONSIDERA	TIONS		
Waste treatment methods Disposal of wastes	This material CFR 261). T comes in cor if the materia the altered m	, as supplied, is not a haza his material could become tact with a hazardous was	ardous waste according to a hazardous waste if it is te, if chemical additions ar altered. Consult 40 CFR	mixed with or otherwise e made to this material, or 261 to determine whether	

14. TRANSPORT INFORMATION

DOT	Not regulated
	Not regulated
IMDG	Not regulated

15. REGULATORY INFORMATION

International Inventories	
TSCA (USA)	Complies
DSL (Canada)	Complies
EINECS (Europe)	Complies
ENCS (Japan)	Complies
IECSC (China)	Complies
KECL (Korea)	Complies
PICCS (Philippines)	Complies
AICS (Australia)	Complies
ERMA (New Zealand)	Complies
Taiwan	Complies

Federal Regulations

<u>SARA 313</u>

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 Hazard Categories

Acute Health Hazard	Yes
Chronic Health Hazard	No
Fire hazard	No
Sudden release of pressure hazard	No
Reactive Hazard	No

Clean Water Act

Clean Air Act, Section 112 Hazardous Air Pollutants (HAPs) and Volatile Organic Compounds (VOCs) (see 40 CFR 61)

Chemical name	CAS No.	Weight-%	VOC chemical
METHANOL	67-56-1	.2987	Yes
Chemical name	CAS No.	Weight-%	HAPS chemical
METHANOL	67-56-1	.2987	Yes

CERCLA

Chemical name	Hazardous Substances Reportable Quantities	Extremely Hazardous Substances RQs
METHANOL 67-56-1	5000 lb	

California Proposition 65

This product contains chemical(s) known to the State of California to cause cancer and/or to cause birth defects or other reproductive harm

16. OTHER INFORMATION					
<u>HMIS</u>	Health hazard 2	Flammability 0	Stability 0	PPE B	
Prepared by	Michelm	Michelman, Inc.			
Revision date	13-Apr-2017				
Reason for revision	No information available				

Disclaimer

The information provided in this data sheet is based on present scientific and technical knowledge and is accurate to the best of Michelman's 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. 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. Michelman makes no warranty of any kind, express or implied, including warranties of merchantability or fitness for a particular purpose, nor any warranty concerning the safe use of this material in the buyer's/user's process or in combination with other substances. In no case shall the descriptions, information, data, or designs provided be considered a part of Michelman's terms and conditions of sale. Since the conditions for the use of the material are not under Michelman's control, it is the buyer's/user's duty to determine the conditions necessary for the safe use of the material. No liability can be accepted for any failure to observe the precautionary measures described in this data sheet or for any misuse of the material.

End of Safety Data Sheet