

SAFETY DATA SHEET

Issue Date 30-May-2018

Revision Date 30-May-2018

Version 2

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

Product identifier		
Product Name	HYSTRENE® 5016 [ALL GRADES]	
Other means of identification		
Biogenix Product Code		10095; 10098; 10099; 10101; 10105; 10110; 10111; 10561; 11221; 22566; 23903; 23904; 24316; 24317; 10427: 40430: 40449: 40482
SDS Code	HYST5016SDS	
Chemical Name	Octadecanoic acid; stearic acid	
Recommended use of the chemical	and restrictions on use	
Recommended Use	Lubricant. Release Agent.	
Uses advised against	Consumer use	
Details of the supplier of the safety		
Supplier Address	Manufacturer Address	Distributor Address
PMC Biogenix, Inc.	PMC Biogenix, Inc.	R.E. Carroll, Inc.
1231 Pope Street	1231 Pope Street	1570 North Olden Avenue
Memphis, TN 38108 USA	Memphis, TN 38108 USA	Trenton, N.J. 08638-3204 USA orders@recarroll.com
Emergency telephone number		
Company Phone Number	PMC Biogenix Customer Service: 1-80	0-641-2152
24 Hour Emergency Phone Number		
Emergency Telephone	Biogenix Environmental Health and Sa	itety Department +1-901-320-5820
	2. HAZARDS IDENTIFICA	ATION
<u>Classification</u>		
OSHA Regulatory Status This chemical is considered hazardous	s by the 2012 OSHA Hazard Communic	ation Standard (29 CFR 1910.1200)
Combustible dust		-
Label elements		
	Emergency Overview	
Warning		
May form combustible dust concentrat	ions in air	
Appearance flakes, Molten, powder	Physical state Solid	Odor Slight
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Hazards not otherwise class	sified (HNOC)
Dust can form an explosive mi	xture with air
Other Information	
Unknown Acute Toxicity	0 % of

0 % of the mixture consists of ingredient(s) of unknown toxicity

3. COMPOSITION/INFORMATION ON INGREDIENTS

Formula

C18H36O2

Chemical Name	CAS No	Weight-%	Trade Secret
Octadecanoic acid	57-11-4	100	*

*. None.

4. FIRST AID MEASURES			
First aid measures			
Eye contact	Molten product can cause thermal burns. Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. (Call a physician if irritation persists).		
Skin Contact	Molten product can cause thermal burns. In case of burns, immediately cool affected skin for as long as possible with cold water. Wash off immediately with plenty of water for at least 15 minutes. (Get medical attention immediately if symptoms occur).		
Inhalation	Remove to fresh air. (Get medical attention immediately if symptoms occur).		
Ingestion	Molten product can cause thermal burns. Clean mouth with water and drink afterwards plenty of water. (Get medical attention immediately if symptoms occur).		
Most important symptoms a	and effects, both acute and delayed		
Symptoms	No information available.		
Indication of any immediate medical attention and special treatment needed			
Note to physicians	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 Do not use a solid water stream as it may scatter and spread fire.

Specific hazards arising from the chemical

Avoid creating dust. Dust can form an explosive mixture with air. Thermal decomposition can lead to release of irritating and toxic gases and vapors. Do not allow run-off from fire-fighting to enter drains or water courses.

Hazardous combustion productsCarbon dioxide (CO2). Carbon monoxide. Hydrocarbons.

Explosion data

Sensitivity to Mechanical Impact None.

Sensitivity to Static Discharge Fine dust dispersed in air, in sufficient concentrations, and in the presence of an ignition source is a potential dust explosion hazard.

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, especially in confined areas. Avoid creating dust. Dust can form an explosive mixture with air.

Environmental precautions

Environmental precautions	See section 12 for additional ecological information. The product is insoluble and floats on water. Prevent further leakage or spillage if safe to do so. Do not allow into any sewer, on the ground or into any body of water. Prevent product from entering drains.
Methods and material for contain	ment and cleaning up
Methods for cleaning up	Use personal protective equipment as required. Take up mechanically, placing in appropriate containers for disposal. Clean contaminated surface thoroughly. Cover powder spill with plastic sheet or tarp to minimize spreading and keep powder dry. Avoid creating dust. Pick up and transfer to properly labeled containers. Where possible allow molten

7. HANDLING AND STORAGE

material to solidify naturally.

Precautions for safe handling

Advice on safe handling Avoid generation of dust. Handle in accordance with good industrial hygiene and safety practice. Avoid creating dust.

Conditions for safe storage, including any incompatibilities			
Storage Conditions	Store at ambient conditions.		
Incompatible materials	Strong oxidizing agents.		

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure Guidelines	Exposure limits are	e listed below, if they exi	ist.		
Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH	PMC OEL	
Octadecanoic acid 57-11-4	TWA: 10 mg/m ³ inhalable particulate matter TWA: 3 mg/m ³ respirable particulate matter	-	-	TWA: 10 mg/m ³	
Dust DUST	TWA: 10 mg/m ³ Inhl TWA: 3 mg/m ³ Resp	TWA: 5 mg/m ³ Resp TWA: 15 mg/m ³ Total 29CFR1910.1000	-	-	
Appropriate engineering contr	ols				
Engineering Controls	Showers, Eyewas	h stations, Ventilation sy	stems.		
Individual protection measure	s, such as personal pro	tective equipment			
Eye/face protection	Wear safety glass	Wear safety glasses with side shields (or goggles).			
Skin and body protection	Heat resistant glov	Heat resistant gloves are recommended when handling molten materials.			
Respiratory protection	respiratory protect required for high a	If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations.			
General Hygiene Consideratio	face, hands and a	Avoid contact with skin, eyes or clothing. Avoid breathing (dust, vapor, mist, gas). Wash face, hands and any exposed skin thoroughly after handling. Use personal protective equipment as required.			

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical state Solid

Appearance Color	flakes, Molten, powder white	Odor Odor threshold	Slight No information available
Property pH	Values_ No information available	Remarks • Method	
Melting point / freezing point Boiling point / boiling range Flash point Evaporation rate	53-56 °C / 127-133 °F > 315 °C / 599 °F 190 °C / 374 °F No information available	Decomposes Cleveland Open Cup	
Flammability (solid, gas) Flammability Limit in Air Upper flammability limit:	No information available No information available		
Lower flammability limit: Vapor pressure Vapor density Specific Gravity	No information available 133 Pa No information available No information available	@ 174 °C	
Water solubility Solubility in other solvents Partition coefficient	No information available No information available 8.23		
Autoignition temperature Decomposition temperature Kinematic viscosity	395 °C / 743 °F 376 °C No information available		
Dynamic viscosity Explosive properties Oxidizing properties	No information available Dust can form an explosive mixtu No information available	re with air	
Other Information			
Softening point Molecular weight VOC Content (%) Density Bulk density Minimum ignition energy (MIE)	No information available 284.4772 0 0.88 g/cm3 @ 25°C No information available 50 mJ		

10. STABILITY AND REACTIVITY

Reactivity

No known effects under normal use conditions.

Chemical stability

Stable under recommended storage conditions.

Possibility of Hazardous Reactions

None under normal processing.

Hazardous polymerization

Hazardous polymerization does not occur.

Conditions to avoid

Avoid creating dust. Dust can form an explosive mixture with air. Extremes of temperature and direct sunlight.

Incompatible materials

Strong oxidizing agents.

Hazardous Decomposition Products

Carbon dioxide (CO2), Carbon monoxide, Hydrocarbons.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Product does not present an acute toxicity hazard based on known or supplied information.
Inhalation of dust in high concentration may cause irritation of respiratory system. No known effect based on information supplied. Vapors may be irritating to eyes, nose, throat, and lungs.
Dust contact with the eyes can lead to mechanical irritation. Molten product can cause thermal burns.
Molten product can cause thermal burns.
No data available.

Chemical Name	Oral LD50 Dermal LD50		Inhalation LC50
Octadecanoic acid	> 4600 mg/kg (Rat)	>5000 mg/kg (Rabbit)	

Information on toxicological effects

Symptoms

No information available.

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

Sensitization	No information available.
Germ cell mutagenicity	No information available.
Carcinogenicity	This product does not contain any carcinogens or potential carcinogens as listed by OSHA, IARC or NTP.
Reproductive toxicity	No information available.
STOT - single exposure	No information available
STOT - repeated exposure	No information available
Aspiration hazard	Not applicable.

Numerical measures of toxicity - Product Information

Unknown Acute Toxicity

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

12. ECOLOGICAL INFORMATION

Ecotoxicity

0 % of the mixture consists of component(s) of unknown hazards to the aquatic environment

Chemical Name	Algae/aquatic plants	Fish	Toxicity to microorganisms	Crustacea
Octadecanoic acid 57-11-4		12000 ug/L >4 d Oncorhynchus kisutch		

Persistence and degradability READILY BIODEGRADABLE.

Bioaccumulation

No information available.

Chemical Name	Partition coefficient	
Octadecanoic acid	8.23	
57-11-4		

Other adverse effects

No information available

13. DISPOSAL CONSIDERATIONS

Waste treatment methods

Disposal of wastes

Disposal should be in accordance with applicable regional, national and local laws and

regulations.

Contaminated packaging

Do not reuse container. Disposal should be in accordance with applicable regional, national and local laws and regulations.

14. TRANSPORT INFORMATION

DOT	Not regulated	
TDG	Not regulated	
<u>MEX</u>	Not regulated	
ICAO (air)	Not regulated	
IATA	Not regulated.	
IMDG	Not regulated	

15. REGULATORY INFORMATION

All of the components in the product are on the following Inventory lists The classification and labeling information in this Safety Data Sheet should be viewed as provisional.

International Inventories

EINECS/ELINCS	Complies
TSCA	Complies
AICS	Complies
DSL/NDSL	Complies
ENCS	Complies
KECL	Complies
PICCS	Complies
IECSC	Complies
NZIOC	Complies
TCSI	Complies

Legend:

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances

ENCS - Japan Existing and New Chemical Substances

IECSC - China Inventory of Existing Chemical Substances

KECL - Korean Existing and Evaluated Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances

AICS - Australian Inventory of Chemical Substances

NZIOC - New Zealand Inventory of Chemicals

TCSI - Taiwan Chemical Substance Inventory

US Federal Regulations

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). Any Substance regulated Title 40 of the Code of Federal Regulations, Part 372 is listed below, if it exists.

SARA 311/312 Hazard Categories

Should this product meet EPCRA 311/312 Tier reporting criteria at 40 CFR 370, refer to Section 2 of this SDS for appropriate classifications. Under the amended regulations at 40 CFR 370, EPCRA 311/312 Tier II reporting for the 2017 calendar year will need to be consistent with updated hazard classifications.

CWA (Clean Water Act)

Any Substance regulated as a pollutant pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42) is listed below, if it exists.

<u>CERCLA</u>

Any Substance regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) is listed below, if it exists.

US State Regulations

California Proposition 65

This product does not contain any Proposition 65 chemicals

U.S. State Right-to-Know Regulations

U.S. EPA Label Information

EPA Pesticide Registration Number Not applicable

16. OTHER INFORMATION						
<u>NFPA</u>	Health hazards 1	Flammability 1	Instability 0	Physical and Chemical Properties -		
HMIS	Health hazards 1	Flammability 1	Physical hazards 0	Personal protection X		
Prepared By PMC Group Issue Date 30-May-2018 Revision Date 30-May-2018 Revision Note No information available This material safety data sheet complies with the requirements of 201 1910.1200)			012 OSHA Hazard Commu	nication Standard (29 CFR		

Disclaimer

The information provided in this Material Safety Data Sheet 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 guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered 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 materials or in any process, unless specified in the text.

End of Safety Data Sheet