

SAFETY DATA SHEET 20-hydroxy Prostaglandin F2.alpha. Lipid Maps MS Standard

Revision: 04/26/2015

	ording to Regulation (EC) No. 1907/2006 as amended by (dentification of the Substance/Mixture and of th	EC) No. 1272/2008
ct Code: ct Name:	dentification of the Substance/Mixture and of th	
ct Name:		e Company/Undertaking
	10007229	
/ms:	20-hydroxy Prostaglandin F2.alpha. Lipid Maps	MS Standard
	9.alpha.,11.alpha.,15S,20-tetrahydroxy-prosta-	
nt identified uses of	the substance or mixture and uses advised aga	
ant identified uses:	-	
of the Supplier of t	-	
pany Name:	Cayman Chemical Company	
	1180 E. Ellsworth Rd.	
	Ann Arbor, MI 48108	
site address:	www.caymanchem.com	
mation:	Cayman Chemical Company	+1 (734)971-3335
ency telephone num	ıber:	
gency Contact:	CHEMTREC Within USA and Canada:	+1 (800)424-9300
	CHEMTREC Outside USA and Canada:	+1 (703)527-3887
	Section 2. Hazards Identifica	ation
ication of the Subst	ance or Mixture:	
fication according t	o Regulation (EC) No 1272/2008 [CLP]:	
-		
-		
	vieny (single exposure), ouregory o	
	nulation (FC) No 1272/2008 [CLP]	
ッンく!ン		
Signal Word:	Danger	
Signal Word: Hazard Phrases:	Danger	
Hazard Phrases:	Danger ure may cause skin dryness or cracking.	
Hazard Phrases:	ure may cause skin dryness or cracking.	
Hazard Phrases: 066: Repeated expos	ure may cause skin dryness or cracking. quid and vapor.	
Hazard Phrases: 066: Repeated expos : Highly flammable lice	ure may cause skin dryness or cracking. quid and vapor. e irritation.	
Hazard Phrases: 066: Repeated expos 5: Highly flammable lic 9: Causes serious eye	ure may cause skin dryness or cracking. quid and vapor. e irritation. ess or dizziness.	
Hazard Phrases: 066: Repeated expos : Highly flammable lic : Causes serious eye : May cause drowsing Precaution Phrases	ure may cause skin dryness or cracking. quid and vapor. e irritation. ess or dizziness.	
Hazard Phrases: 066: Repeated expos : Highly flammable lic : Causes serious eye : May cause drowsin Precaution Phrases : Keep away from {he	ure may cause skin dryness or cracking. quid and vapor. e irritation. ess or dizziness.	
Hazard Phrases: 066: Repeated expos : Highly flammable lic : Causes serious eye : May cause drowsin Precaution Phrases : Keep away from {he	ure may cause skin dryness or cracking. quid and vapor. e irritation. ess or dizziness. s: eat/sparks/open flames/hot surfaces} No smoking. st/fume/gas/mist/vapors/spray}.	
Hazard Phrases: 066: Repeated expos : Highly flammable lic : Causes serious eye : May cause drowsin Precaution Phrases : Keep away from {he : Avoid breathing {du : Wash {hands} thoro	ure may cause skin dryness or cracking. quid and vapor. e irritation. ess or dizziness. s: eat/sparks/open flames/hot surfaces} No smoking. st/fume/gas/mist/vapors/spray}.	
Hazard Phrases: 066: Repeated expos 2: Highly flammable lid 2: Causes serious eye 3: May cause drowsing Precaution Phrases 2: Keep away from {he 2: Avoid breathing {du 4: Wash {hands} thoro 2: Wear {protective glo	ure may cause skin dryness or cracking. quid and vapor. e irritation. ess or dizziness. : eat/sparks/open flames/hot surfaces} No smoking. st/fume/gas/mist/vapors/spray}. oughly after handling.	
Hazard Phrases: 066: Repeated expos : Highly flammable lid : Causes serious eye : May cause drowsing Precaution Phrases : Keep away from {he : Avoid breathing {du : Wash {hands} thoro : Wear {protective glo Response Phrases:	ure may cause skin dryness or cracking. quid and vapor. e irritation. ess or dizziness. :: eat/sparks/open flames/hot surfaces} No smoking. st/fume/gas/mist/vapors/spray}. oughly after handling. oves/protective clothing/eye protection/face protection	on}.
Hazard Phrases: 066: Repeated expos 2: Highly flammable lid 2: Causes serious eye 3: May cause drowsing Precaution Phrases 2: Keep away from {he 2: Avoid breathing {du 3: Wash {hands} thoro 3: Wear {protective glo Response Phrases 3: +361+353: IF ON SK	ure may cause skin dryness or cracking. quid and vapor. e irritation. ess or dizziness. : eat/sparks/open flames/hot surfaces} No smoking. st/fume/gas/mist/vapors/spray}. oughly after handling.	on}.
Hazard Phrases: 066: Repeated expos 5: Highly flammable lid 6: Causes serious eye 7: May cause drowsine Precaution Phrases 7: Keep away from {he 7: Avoid breathing {du 7: Wash {hands} thoro 7: Wear {protective glo 7: Wear {protective glo 8: Add the series 8: Add the series 9: Add t	ure may cause skin dryness or cracking. quid and vapor. e irritation. ess or dizziness. eat/sparks/open flames/hot surfaces} No smoking. st/fume/gas/mist/vapors/spray}. hughly after handling. oves/protective clothing/eye protection/face protection face protection i: IN (or hair): Remove/take off immediately all contant	on}. ninated clothing. Rinse skin with
Hazard Phrases: 066: Repeated expos : Highly flammable lid : Causes serious eye : May cause drowsing Precaution Phrases : Keep away from {he : Keep away from {he : Avoid breathing {du : Wash {hands} thoro : Wear {protective glo Response Phrases: +361+353: IF ON SK r/shower. +340: IF INHALED: F	ure may cause skin dryness or cracking. quid and vapor. e irritation. ess or dizziness. :: eat/sparks/open flames/hot surfaces} No smoking. st/fume/gas/mist/vapors/spray}. oughly after handling. oves/protective clothing/eye protection/face protection	on}. ninated clothing. Rinse skin with tion comfortable for breathing.
	bany Name: site address: nation: ency telephone num gency Contact: fication of the Subst fication according to mable Liquids, Cate ous Eye Damage/Eye ific Target Organ To Elements:	1180 E. Ellsworth Rd. Ann Arbor, MI 48108 site address: www.caymanchem.com mation: Cayman Chemical Company ency telephone number: CHEMTREC Within USA and Canada: gency Contact: CHEMTREC Outside USA and Canada: CHEMTREC Outside USA and Canada: Section 2. Hazards Identification ication of the Substance or Mixture: fication according to Regulation (EC) No 1272/2008 [CLP]: mable Liquids, Category 2 pus Eye Damage/Eye Irritation, Category 2 ific Target Organ Toxicity (single exposure), Category 3



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P312: Call a POISON CENTER or doctor/physician if you feel unwell.

P337+313: If eye irritation persists, get medical advice/attention.

GHS Storage and Disposal Phrases:

Please refer to Section 7 for Storage and Section 13 for Disposal information.

2.3 Adverse Human Health Causes serious eye irritation.

Effects and Symptoms: Material may be irritating to the mucous membranes and upper respiratory tract.

May be harmful by inhalation, ingestion, or skin absorption.

May cause drowsiness or dizziness.

May cause skin or respiratory system irritation.

Repeated exposure may cause skin dryness or cracking.

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

Section 3. Composition/Information on Ingredients

CAS # / RTECS #	Hazardous Components (Chemical Name)/ REACH Registration No.	Concentration	EC No./ EC Index No.	GHS Classification
57930-92-4 NA	20-hydroxy Prostaglandin F2.alpha.	0.05 %	NA NA	Acute Tox.(O) 4: H302 Toxic Repro. 1B: H360
79-20-9 Al9100000	Methyl acetate	99.95 %	201-185-2 607-021-00-X	Flam. Liq. 2: H225 Eye Damage 2: H319 STOT (SE) 3: H335 H336

Section 4. First Aid Measures

4.1 Description of First Aid No data available.

In Case of Inhalation:	Remove to fresh air. If not breathing, give artificial respiration or give oxygen by trained personnel.
	Get immediate medical attention.
In Case of Skin Contact:	Immediately wash skin with soap and plenty of water for at least 15 minutes. Remove contaminated

clothing. Get medical attention if symptoms occur. Wash clothing before reuse.

In Case of Eye Contact: Hold eyelids apart and flush eyes with plenty of water for at least 15 minutes. Have eyes examined and tested by medical personnel.

In Case of Ingestion: Wash out mouth with water provided person is conscious. Never give anything by mouth to an unconscious person. Get medical attention. Do NOT induce vomiting unless directed to do so by medical personnel.

4.2 Important Symptoms and Exposure may cause: coughing, dizziness, drowsiness, headache, narcosis, optic nerve atrophy,Effects, Both Acute and chest tightness.

Delayed:

Measures:

Section 5. Fire Fighting Measures

5.1 Suitable Extinguishing Use alcohol-resistant foam, carbon dioxide, water, or dry chemical spray.
 Media: Use water spray to cool fire-exposed containers.
 Unsuitable Extinguishing A solid water stream may be inefficient.
 Media:
 5.2 Flammable Properties and Can release vapors that form explosive mixtures at temperatures at or above the flash point.
 Hazards: Container explosion may occur under fire conditions.
 Emits toxic fumes under fire conditions.
 Sensitive to static discharge.
 Vapors can travel to a source of ignition and flash back.

Flash Pt: -10.00 C Method Used: Closed Cup

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6	J		20-hydroxy Pr	ostaglandin F2.alph	a. Lipid Maps	evision: 04/26/2015
Cay	man			MS Standard	i te	VISION. 04/20/2013
	Explos	ve Limits:	LEL: 3.1% at	25.0 C UEL: 16.0%	at 25.0 C	
	Autoig	nition Pt:	455.00 C			
5.3	Fire Fig	hting Instructions	As in any fire, wear s	elf-contained breathing appar	atus pressure-demand (NIOS	3H approved or
			• • •	protective gear to prevent cont	act with skin and eyes.	
			Note: Flammable as	diluted in methyl acetate.		
			Section 6. Ac	cidental Release M	easures	
6.1	Protect	ive Precautions,	Avoid breathing vapo	ors and provide adequate ven	tilation.	
	Protect	ive Equipment and	d As conditions warrar	nt, wear a NIOSH approved se	elf-contained breathing appar	atus, or respirator,
	Emerge	ency Procedures:	and appropriate pers	sonal protection (rubber boots	, safety goggles, and heavy r	ubber gloves).
6.2	Enviror	nmental	Take steps to avoid	release into the environment,	if safe to do so.	
	Precau	tions:				
6.3			r Contain spill and coll			
		ment and Cleanin	ig I ransfer to a chemic	al waste container for disposa	al in accordance with local reg	julations.
	Up:					
			Section 7.	Handling and Sto	rage	
7.1	Precau	tions To Be Taken	Avoid breathing dust/	fume/gas/mist/vapours/spray.		
	in Hanc	lling:	Avoid prolonged or re			
			Keep away from sour	-		
	_			neasures against static discha	irge.	
7.2			 Keep away from heat Keep container tightly 			
	in Stori	ng.		with information listed on the p	product insert.	
	Other F	Precautions:	Protect from moisture			
—		Soci	tion 9 Exposu	ura Controla/Dorgon	al Drotaction	
		re Parameters:		ire Controls/Person		
8.1 CAS	•	Partial Chemical	Namo	Britain EH40	France VL	Europe
	# 30-92-4		aglandin F2.alpha.	No data.	No data.	No data.
			agiandin F2.aipha.	TWA: 616 mg/m3 (200 ppm)		
/9)-20-9	Methyl acetate		STEL: 770 mg/m3 (250 ppm)	TWA: 610 mg/m3 (200 ppm) STEL: 760 mg/m3 (250 ppm)	No data.
CAS	#	Partial Chemical	Name	OSHA TWA	ACGIH TWA	Other Limits
5793	30-92-4	20-hydroxy Prosta	aglandin F2.alpha.	No data.	No data.	No data.
79	-20-9	Methyl acetate	<u> </u>	PEL: 200 ppm	TLV: 200 ppm	No data.
					STEL: 250 ppm	
8.2	Exposu	re Controls:				
8.2.1	-	ering Controls	-	res, local exhaust ventilation,	or other engineering controls	to control airborne
	•	tion etc.):		ended exposure limits.		
8.2.2		al protection equi	•			
	-	otection:	Safety glasses			
		ive Gloves:	Compatible chemical	-resistant gloves		
		Protective Clothing	-			
	-	atory Equipment	NIOSH approved res	pirator, as conditions warrant.		
		у Туре):	De met teles 1 (
			Do not take internally	tilizing this material should be	equipped with an avouach a	nd a safaty above
	ce Prac		Wash thoroughly after		equipped with an eyewash a	
			and anotoughly uno			M
						Multi-region forma



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Section 9. Physical and Chemical Properties

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9.1	Information on Basic Phy	vsical and Chemical Properties
	Physical States:	[]Gas [X]Liquid []Solid
	Appearance and Odor:	A solution in methyl acetate
	Melting Point:	No data.
	Boiling Point:	No data.
	Flash Pt:	-10.00 C Method Used: Closed Cup
	Evaporation Rate:	No data.
	Explosive Limits:	LEL: 3.1% at 25.0 C UEL: 16.0% at 25.0 C
	Vapor Pressure (vs. Air o	or mm 173 MM_HG at 20.0 C
	Hg):	
	Vapor Density (vs. Air =	1): No data.
	Specific Gravity (Water =	= 1): No data.
	Solubility in Water:	No data.
	Autoignition Pt:	455.00 C
9.2	Other Information	
	Percent Volatile:	No data.
	Molecular Formula & We	eight: C20H34O6 370.5
		Section 10. Stability and Reactivity
10.1	Reactivity:	No data available.
10.2	Stability:	Unstable [] Stable [X]
10.3	Stability Note(s):	Stable if stored in accordance with information listed on the product insert.
	Polymerization:	Will occur [] Will not occur [X]
10.4	Conditions To Avoid:	heat, flames and sparks
10.5	Incompatibility - Materia	
	To Avoid:	alkalis
		nitrates
		strong oxidizing agents
10.6	Hazardous	carbon dioxide
	Decomposition Or	carbon monoxide
	Byproducts:	

No data available.



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ay	man		20-nyara	MS Stand	-	. Lipia Mi	aps _{Revis}	sion: 04/26/201
			Sectio	n 11. Toxicologica	l Informa	ation		
1.1 Information on Toxicological Effects: Chronic Toxicological Effects:			The toxicological effects of this product have not been thoroughly studied. Methyl Acetate - Toxicity Data: Oral LD50 (rat): >5,000 mg/kg; Oral LD50 (rabbit): 3,705 mg/kg; Skin LD50 (rabbit): >5,000 mg/kg; Inhalation TCLO (human): 15,000 mg/m3; Methyl Acetate - Irritation Data: Skin (rabbit): 500 mg (24h) mild; Eyes (rabbit): 100 mg (24h) moderate; Only select Registry of Toxic Effects of Chemical Substances (RTECS) data is presented here. See actual entry in RTECS for complete information.					
arci	nogenicity	<i>.</i>	Methyl Aceta NTP? No	ate RTECS Number: Al9100 IARC Monographs? No		egulated? No		
CAS		Hazardous Com		<u> </u>	NTP	IARC	ACGIH	OSHA
	30-92-4	20-hydroxy Prost		-	n.a.	n.a.	n.a.	n.a.
79	-20-9	Methyl acetate	<u> </u>	·	n.a.	n.a.	n.a.	n.a.
		Į	Secti	on 12. Ecological	Informat	ion	!	
2.1	Toxicity:			e into the environment. fire control or dilution water	may cause p	ollution.		
2.2	Persiste Degrada		No data avai	ilable.				
2.3	Bioaccu Potentia		No data avai	ilable.				
2.4	Mobility	in Soil:	No data avai	ilable.				
2.5	Results of assessm	of PBT and vPvB nent:	No data ava	ilable.				
2.6	Other ad	verse effects:	No data ava	ilable.				
			Sectio	n 13. Disposal Co	nsiderat	ions		
3.1	Waste D	isposal Method:	Dispose in a	ccordance with local, state,	and federal r	egulations.		
			Sect	tion 14. Transport	Informat	tion		
14.1	LAND T	RANSPORT (US I	DOT):					
D	OT Prope	r Shipping Name:	: Methyl A	Acetate Solution				
D	OT Hazaro	d Class:	3	FLAMMABLE LIQU	ID			
U	N/NA Num	nber:	1231	Р	acking Grou	ıp:	II	
			FLOMMOBLE L	ICUID				
14.1	LAND T	RANSPORT (Euro	-	-				
		hipping Name:		Acetate Solution				
-	N Number		1231		acking Grou	ıp:	II	
Н	azard Clas	SS:	3 - FLAN	MMABLE LIQUID				
							_	

Multi-region format



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14.3	AIR TRANSPORT (ICAO/IATA):
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ICAO/IATA Shipping Name:	Methyl Acetate Solution		
UN Number:	1231	Packing Group:	II
Hazard Class:	3 - FLAMMABLE LIQUID	IATA Classification:	3
Additional Transport	Transport in accordance with loca	l, state, and federal regulations.	
Information:	When sold in quantities of less that	an or equal to 1 mL, or 1 g, with ar	n Excepted Quantity Code of
	E1, E2, E4, or E5, this item meets	the De Minimis Quantities exemp	tion, per IATA 2.6.10.
	Therefore packaging does not have	ve to be labeled as Dangerous Go	ods/Excepted Quantity.

Section 15. Regulatory Information

0-hydroxy Prosta lethyl acetate l azardous Com	ponents (Chemical Name) aglandin F2.alpha. ponents (Chemical Name) aglandin F2.alpha. This SDS was prepared in acc No.1272/2008. Section 16. Of	PROP.65: No CAA HAP,ODC: Inventory, 4 Test cordance with 29 CFF	No; CWA NPDES: No; CWA NPDES: t, 8A PAIR; CA PR	OP.65: No
Iethyl acetate Iazardous Com 0-hydroxy Prosta Iethyl acetate	ponents (Chemical Name) aglandin F2.alpha. This SDS was prepared in acc No.1272/2008.	No Other US EPA o CAA HAP,ODC: PROP.65: No CAA HAP,ODC: Inventory, 4 Test cordance with 29 CFF	No r State Lists No; CWA NPDES: No; CWA NPDES: t, 8A PAIR; CA PR	No No; TSCA: No; CA No; TSCA: Yes - OP.65: No
lazardous Com 0-hydroxy Prosta 1ethyl acetate	aglandin F2.alpha. This SDS was prepared in acc No.1272/2008.	Other US EPA o CAA HAP,ODC: PROP.65: No CAA HAP,ODC: Inventory, 4 Test cordance with 29 CFF	r State Lists No; CWA NPDES: No; CWA NPDES: t, 8A PAIR; CA PR	No; TSCA: No; CA No; TSCA: Yes - OP.65: No
0-hydroxy Prost 1ethyl acetate	aglandin F2.alpha. This SDS was prepared in acc No.1272/2008.	CAA HAP,ODC: PROP.65: No CAA HAP,ODC: Inventory, 4 Test cordance with 29 CFF	No; CWA NPDES: No; CWA NPDES: t, 8A PAIR; CA PR	No; TSCA: Yes - OP.65: No
lethyl acetate	This SDS was prepared in acc No.1272/2008.	PROP.65: No CAA HAP,ODC: Inventory, 4 Test cordance with 29 CFF	No; CWA NPDES: t, 8A PAIR; CA PR	No; TSCA: Yes - OP.65: No
	No.1272/2008.	Inventory, 4 Test	, 8A PAIR; CA PR	OP.65: No
nation	No.1272/2008.		R 1910.1200 and R	egulation (EC)
	Section 16. Of	the sur lister was esti-		
		ther information	on	
	04/26/2015			
ation About	No data available.			
or Disclaimer:	currently available to us. Howe express or implied, with respe	ever, we make no wa ct to such informatior	rranty of merchanta	ability or any other warrant no liability resulting from its
		r Disclaimer: DISCLAIMER: This informatio currently available to us. How express or implied, with respe use. Users should make their	r Disclaimer: DISCLAIMER: This information is believed to be ac currently available to us. However, we make no wa express or implied, with respect to such information use. Users should make their own investigations to	r Disclaimer: DISCLAIMER: This information is believed to be accurate and represe currently available to us. However, we make no warranty of merchanta express or implied, with respect to such information, and we assume r use. Users should make their own investigations to determine the suit