SAFETY DATA SHEET



Acetylene

Version 2.1

ECTION 1: Identification of the substance/mixture and of the company/undertaking		
Product information		
	Acetylene 1091007, 1036981	
Use :	Chemical intermediate	
Company :	Chevron Phillips Chemical Company LP 10001 Six Pines Drive The Woodlands, TX 77380	
Emergency telephone:		
Mexico CHEMTREC 01-800 South America SOS-Cotec I Argentina: +(54)-115983943 EUROPE: BIG +32.14.5845 Austria: VIZ +43 1 406 43 43 Belgium: 070 245 245 (24 ho Bulgaria: +359 2 9154 233 Croatia: +3851 2348 342 (24 Cyprus: 1401 Czech Republic: Toxicologic	al) or 703.527.3887(int'l) 9186 1132) China: 0532 8388 9090 -681-9531 (24 hours) nside Brazil: 0800.111.767 Outside Brazil: +55.19.3467.1600 1 45 (phone) or +32.14583516 (telefax) 3 (24 hours/day, 7 days/week) ours/day, 7 days/week)	
Estonia: BIG +32.14.584545 Finland: 0800 147 111 09 4 France: ORFILA number (IN Germany: BIG +32.14.58454 Greece: (0030) 2107793777 Hungary: +36-80-201-199 (2	5 (phone) or +32.14583516 (telefax) 71 977 (24 hours/day) IRS): + 33 (0) 1 45 42 59 59 (24 hours/day, 7 days/week) 45 (phone) or +32.14583516 (telefax) 7 (24 hours/day, 7 days/week) 24 hours/day, 7 days/week)	
Italy: BIG +32.14.584545 (pl Latvia: State Fire and Rescu Poisoning and Drug Informa 67042473. (24 hours.)	/day, 7 days/week) (phone) or +32.14583516 (telefax) none) or +32.14583516 (telefax) ie Service, phone number: 112; Toxicology and Sepsis Clinic ation Center, Hipokrāta 2, Riga, Latvia, LV-1038, phone number +371 84545 (phone) or +32.14583516 (telefax)	
SDS Number:100000013381	1/16	

Acetylene

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Malta: +356 2395 2000 The Netherlands: NVIC: Norway: 22 59 13 00 (24 Poland: BIG +32.14.5845 Portugal: CIAV phone nu Romania: +40213183606 Slovakia: +421 2 5477 4 Slovenia: Phone number	2 5500 (24 hours/day, 7 days/week) +31 (0)88 755 8000 hours/day, 7 days/week) 545 (phone) or +32.14583516 (telefax) imber: +351 800 250 250 5 166 :: 112 hcy Telephone Number of Spanish Poison Centre: +34 91 562 04 20 (2
E-mail address Website	 Product Safety and Toxicology Group SDS@CPChem.com www.CPChem.com
CTION 2: Hazards identifica	tion
	 Sified in accordance with the hazard communication standard 29 CFR bels contain all the information as required by the standard. Flammable gases, Category 1 Gases under pressure, Compressed gas
Labeling	
Symbol(s)	\wedge \wedge
Signal Word	: Danger
Signal Word Hazard Statements	 Danger H220: Extremely flammable gas. H280: Contains gas under pressure; may explode if heated.
-	: H220: Extremely flammable gas.
Hazard Statements	 H220: Extremely flammable gas. H280: Contains gas under pressure; may explode if heated. Prevention: P210 Keep away from heat/ sparks/ open flames/ hot surfaces. No smoking. Response: P377 Leaking gas fire: Do not extinguish, unless leak can be stopped safely. P381 Eliminate all ignition sources if safe to do so. Storage: P410 + P403 Protect from sunlight. Store in a well-ventilated
Hazard Statements Precautionary Statements	 H220: Extremely flammable gas. H280: Contains gas under pressure; may explode if heated. Prevention: P210 Keep away from heat/ sparks/ open flames/ hot surfaces. No smoking. Response: P377 Leaking gas fire: Do not extinguish, unless leak can be stopped safely. P381 Eliminate all ignition sources if safe to do so. Storage: P410 + P403 Protect from sunlight. Store in a well-ventilated

etylene			SAFETY DATA SH	
ion 2.1			Revision Date 2023-1	
NTP		No ingredient of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen		
TION 3: Composition/infor	mation on i	ngredients		
Synonyms	: Ethyne	!		
Molecular formula	: C2H2			
Component		CAS-No.	Weight %	
Acetylene		74-86-2	97 - 100	
Dimethylformamide		68-12-2	0 - 3	
Ethane		74-84-0	0 - 2.5	
Ethylene		74-85-1	0 - 2.5	
Propylene		115-07-1	0 - 2	
TION 4: First aid measures	5			
General advice		out of dangerous a o the doctor in att	area. Show this material safety data endance.	
If inhaled			recovery position and seek medical rsist, call a physician.	
In case of eye contact	lenses.	: Flush eyes with water as a precaution. Remove contact lenses. Protect unharmed eye. Keep eye wide open while rinsing. If eye irritation persists, consult a specialist.		
If swallowed			ear. Never give anything by mouth to If symptoms persist, call a physician.	
TION 5: Firefighting measu	ures			
Flash point		C (0.1°F) d: closed cup		
Autoignition temperature	: 305°C	(581°F)		
Suitable extinguishing media	: Alcoho	I-resistant foam.	Carbon dioxide (CO2). Dry chemical.	
Unsuitable extinguishing media	: High vo	olume water jet.		
			athing apparatus for firefighting if	
Special protective equipment for fire-fighters	necess			
	: For saf separa		se of fire, cans should be stored tainments. Use a water spray to cool	
equipment for fire-fighters	: For saf separa fully clo	tely in closed con osed containers.		

Image: Second	cetylene			SA	FETY DATA SHEE	
protection Take necessary action to avoid static electricity discharge (which might cause ignition of organic vapors). Use only explosion-proof equipment. Keep away from open flames, hot surfaces and sources of ignition. Hazardous decomposition : Carbon. Carbon oxides. products :: Carbon. Carbon oxides. ECTION 6: Accidental release measures :: Ensure adequate ventilation. Remove all sources of ignition. Evacuate personnel to safe areas. Beware of vapors accumulating to form explosive concentrations. Vapors can accumulate in low areas. Environmental precautions :: Prevent product from entering drains. Prevent further leakage or spillage if safe to do so. If the product contaminates rivers and lakes or drains inform respective authorities. ECTION 7: Handling : Advice on safe handling : Do not breathe vapors/dust. For personal protection see section 8. Smoking, eating and drinking should be prohibiled in the application area. Take precationary measures against in work rooms. Container may be opened only under exhaust ventilation hood. Open drum carefully as content may be under pressure. Dispose of rinse water in accordance with local and national regulations. Advice on protection against fire and explosion : Do not spray on a naked flame or any incandescent material. Take necessary action to avoid static electricity discharge (which might cause ignition of working materials must comply with the technological safety standards. Use : Prevent unauthorized access. No smoking. Keep container tighty closed in a dry and well-ventilated place. Observe label precautions. Electricit installati				Revis	ion Date 2023-11-1	
products ECTION 6: Accidental release measures Personal precautions : Ensure adequate ventilation. Remove all sources of ignition. Evacuate personnel to safe areas. Beware of vapors accumulating to form explosive concentrations. Vapors can accumulate in low areas. Environmental precautions : Prevent product from entering drains. Prevent further leakage or spillage if safe to do so. If the product contaminates rivers and lakes or drains inform respective authorities. ECTION 7: Handling and storage Handling Advice on safe handling : Do not breathe vapors/dust. For personal protection see section 8. Smoking, eating and drinking should be prohibited in the application area. Take precautionary measures against static discharges. Provide sufficient air exchange and/or exhaust wentilation hood. Open drum carefully as content may be under pressure. Dispose of rinse water in accordance with local and national regulations. Advice on protection against fire and explosion : Do not spray on a naked flame or any incandescent material. Take necessary action to avoid static electricity discharge (which might cause ignition of organic vapors). Use only explosion-proof equipment. Keep away from open flames, hot surfaces and containers Storage : Prevent unauthorized access. No smoking. Keep container tightly closed in a dry and well-ventilated place. Observe label precautions. Electrical installations / working materials must comply with the technological safety standards. Use : Chemical intermediate ETTON 5: Exposure controls/personal protection Inperedients wit		(which explosi	(which might cause ignition of organic vapors). Use only explosion-proof equipment. Keep away from open flames, hot			
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against fire and explosion Take necessary action to avoid static electricity discharge (which might cause ignition of organic vapors). Use only explosion-proof equipment. Keep away from open flames, hot surfaces and sources of ignition. Storage Requirements for storage areas and containers : Prevent unauthorized access. No smoking. Keep container tightly closed in a dry and well-ventilated place. Observe label precautions. Electrical installations / working materials must comply with the technological safety standards. Use : Chemical intermediate ECTION 8: Exposure controls/personal protection Ingredients with workplace control parameters Somponents Basis Value Outrol parameters Note Somponents Basis Value Dimethylformamide ACGIH TWA 5 ppm,	Advice on safe handling	section in the a static d exhaus exhaus be und	8. Smoking, ea pplication area. ischarges. Prov t in work rooms. t ventilation hoo er pressure. Dis	ting and drinking should Take precautionary me ide sufficient air exchar Container may be ope d. Open drum carefully pose of rinse water in a	d be prohibited easures against nge and/or med only under as content may	
Requirements for storage areas and containers : Prevent unauthorized access. No smoking. Keep container tightly closed in a dry and well-ventilated place. Observe label precautions. Electrical installations / working materials must comply with the technological safety standards. Use : Chemical intermediate ECTION 8: Exposure controls/personal protection Ingredients with workplace control parameters Components Basis Value Control parameters Dimethylformamide ACGIH TWA 5 ppm,		Take n (which explosi	ecessary action might cause ign on-proof equipm	to avoid static electricity tion of organic vapors). ent. Keep away from o	/ discharge Use only	
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ECTION 8: Exposure controls/personal protection Ingredients with workplace control parameters Components Basis Value Control parameters Note Dimethylformamide ACGIH TWA 5 ppm, A3, Skin,		tightly o precaut	closed in a dry a tions. Electrical	nd well-ventilated place installations / working n	. Observe label naterials must	
Ingredients with workplace control parameters Components Basis Value Control parameters Note Dimethylformamide ACGIH TWA 5 ppm, A3, Skin,	Use	: Chemic	cal intermediate			
Ingredients with workplace control parameters S S Components Basis Value Control parameters Note Dimethylformamide ACGIH TWA 5 ppm, A3, Skin,	ECTION 8: Exposure controls	s/personal p	rotection			
Components Basis Value Control parameters Note Dimethylformamide ACGIH TWA 5 ppm, A3, Skin,	Ingredients with workplac	· · · ·				
Dimethylformamide ACGIH TWA 5 ppm, A3, Skin,		Basis	Value	Control parameters	Note	
		ACGIH	TWA	5 ppm,	A3, Skin,	
OSHA Z-1 TWA 10 ppm, 30 mg/m3 X, OSHA Z-1-A TWA 10 ppm, 30 mg/m3 X,						
Ethylene ACGIH TWA 200 ppm, A4,	-thylene		TWA			

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Propylene A3 Confirmed animal carcinoge A4 Not classifiable as a humar Skin Danger of cutaneous absor X Skin notation Immediately Dangerous te	n carcinogen ption	own relevanc			A4,	
Substance name	CAS	S-No.	Control paran	neters	Update	
Dimethylformamide	68-12-2		Immediately Dangerous to Concentration Value 500 parts per million	Life or Health	1995-03-01	
Biological exposure indic	es					
Substance name	CAS-No.	C	control parameters	Sampling time	Update	
Dimethylformamide 68-	-12-2	Total N-M represent Methylfor (Hydroxyr	lethylformamide: 30 mg/l lethylformamide s the sum of N- mamide and N- nethyl)-N- mamide (Urine)	End of shift (As soon as possible after exposure ceases)	2018-03-20	
			S-(N-methylcarbamoyl)	End of shift at end of workweek	2018-03-20	
		aterial, the	e personal protective e	equipment listed		
recommended. The user sl the equipment since protec	hould rea tion is us	aterial, the	e personal protective e derstand all instruction	equipment listed	below is s supplied with	
recommended. The user since protection the equipment since protection of the equipment since protection of the second sec	hould rea tion is us oment : If m nc re ain pr ain pr lev	aterial, the ad and un sually prov ventilation aintain min ormal atmo spirator ma ovides pro essure, ai otential for vels are no	e personal protective e derstand all instruction	equipment listed as and limitation or under certain controls are not of 19.5% by volu- upplied-air NIOS exposure to har OSH approved in priate, such as: may be appropri aerosolization, umstances whe	adequate to ume under SH approved mful levels of respirator that A positive riate if there is exposure ere air-	
recommended. The user since equipment since protective equipment since equipment since equipment since equipment equipment since equipment sin	hould reation is us oment : If m nc re aiu pr pc le ^v pu : Th wi th wi cc pr cc	aterial, the ad and un sually prov- ventilation aintain minormal atmo- spirator ma ovides pro- essure, ai otential for vels are no urifying res- ne suitabili th the pro- e instruction oduct is u- ontact time	e personal protective e derstand all instruction rided for a limited time or other engineering himal oxygen content ospheric pressure, a s ay be appropriate. If terial may occur, a Nic terial may occur, a Nic otection may be appro r-supplying respirator uncontrolled release, ot known, or other circ	equipment listed as and limitation or under certain or under certain of 19.5% by volu- upplied-air NIOS exposure to har OSH approved in priate, such as: may be appropri- aerosolization, umstances whe ide adequate pr lace should be of re gloves. Pleas bility and breakt r of the gloves nditions under v er of cuts, abras- iscarded and rej	adequate to ume under SH approved mful levels of respirator that A positive riate if there is exposure re air- otection. discussed se observe through time Also take into which the sion, and the placed if there	
recommended. The user solution the equipment since protective equipment since protective equipment since protection Respiratory protection	hould rea tion is us oment : If m nc re ain pr pc lev pu : Th wi th wh cc pr cc is	aterial, the ad and un sually prov- ventilation aintain min ormal atmo- spirator ma ovides pro- essure, ai otential for vels are no vels are no vels are no vels are no intential for vels are no intent	e personal protective e derstand all instruction rided for a limited time or other engineering himal oxygen content ospheric pressure, a s ay be appropriate. If terial may occur, a Nil otection may be appro r-supplying respirator uncontrolled release, ot known, or other circ pirators may not prov ty for a specific workp ducers of the protective ons regarding permea rovided by the supplie on the specific local co sed, such as the dang e. Gloves should be di	equipment listed as and limitation or under certain or under certain of 19.5% by volu- upplied-air NIOS exposure to har OSH approved to priate, such as:. may be appropri- aerosolization, umstances whe ide adequate pri- lace should be of re gloves. Pleas bility and breakt r of the gloves. A nditions under w er of cuts, abras- iscarded and re- r chemical break	adequate to ume under SH approved mful levels of respirator that A positive riate if there is exposure ere air- otection. discussed se observe through time Also take into which the sion, and the placed if there through.	

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	concentration and amount of dangerous substances, and to the specific work-place. Wear as appropriate:. Flame retardant antistatic protective clothing. Workers should wear antistatic footwear.
Hygiene measures	: Wash hands before breaks and at the end of workday.
TION 9: Physical and chem	ical properties
Information on basic physi	ical and chemical properties
Appearance	
Form Physical state Color Odor	: Compressed gas : Gaseous : Colorless : garlic-like
Safety data	
Flash point	: -17.7°C (0.1°F) Method: closed cup
Lower explosion limit	: 2.5 %(V)
Upper explosion limit	: >99 %(V)
Oxidizing properties	: No
Autoignition temperature	: 305°C (581°F)
Molecular formula	: C2H2
Molecular weight	: 26.04 g/mol
рН	: Not applicable
Pour point	: No data available
Freezing point	-80.6°C (-113.1°F)
Boiling point/boiling range	: -84°C (-119°F)
Vapor pressure	: 649.00 PSI at 21°C (70°F)
Relative density	: No data available
Density	: 0.62 G/ML
Water solubility	: Soluble in acetone, benzene, chloroform and many organic solvents; slightly soluble in water and alcohol.
Partition coefficient: n-	: No data available
octanol/water Viscosity, kinematic	: No data available
Relative vapor density Number:100000013381	: 0.91 6/16

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	(Air = 1.0)
Evaporation rate	: No data available
Percent volatile	
Percent volatile	: > 99 %
ECTION 10: Stability and reacti	vity
Reactivity	: Stable under recommended storage conditions.
Chemical stability	: This material is considered stable under normal ambient and anticipated storage and handling conditions of temperature and pressure.
Possibility of hazardous rea	ctions
Hazardous reactions	: Further information: No decomposition if stored and applied as directed.
	Hazardous reactions: Vapors may form explosive mixture with air.
Conditions to avoid	: Heat, flames and sparks.
Materials to avoid	: May react with oxygen and strong oxidizing agents, such as
Hazardous decomposition products	chlorates, nitrates, peroxides, etc. : Carbon Carbon oxides
Other data	: No decomposition if stored and applied as directed.
ECTION 11: Toxicological infor	mation
Asstalans	
Acetylene Acute oral toxicity	: Negligible or unlikely exposure pathways
Acetylene Acute inhalation toxicity	: Acute toxicity estimate: > 30000 ppm Exposure time: 4 h Test atmosphere: gas Method: Calculation method
Acetylene Acute dermal toxicity	: Negligible or unlikely exposure pathways
Acetylene Skin irritation	: No skin irritation.
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Eye irritation	: No eye irritation.
Acetylene Sensitization	: No adverse effects expected.
Repeated dose toxicity	
Ethane	 Species: Rat, Male and female Sex: Male and female Application Route: Inhalation Dose: 0, 1600, 5000, 16000 ppm Exposure time: 6 weeks Number of exposures: 6 hours/day, 7 days/week NOEL: 16000 ppm Test substance: yes Method: OECD Guideline 422
Propylene	Species: Rat, Male and female Sex: Male and female Application Route: Inhalation Dose: 625,1250,2500,5000, 10000 ppm Exposure time: 14 wk Number of exposures: 6 Hr/d, 5 d/wk NOEL: 10000 ppm
	Species: Mouse, Male and female Sex: Male and female Application Route: Inhalation Dose: 625,1250,2500,5000, 10000 ppm Exposure time: 14 wk Number of exposures: 6 Hr/d, 5 d/wk NOEL: 10000 ppm
	Species: Rat, Male and female Sex: Male and female Application Route: Inhalation Dose: 0, 5000, 10000 ppm Exposure time: 103 wk Number of exposures: 6 Hr/d, 5 d/wk Lowest observable effect level: 5000 ppm Not classified due to data which are conclusive although insufficient for classification.
	Species: Mouse, Male and female Sex: Male and female Application Route: Inhalation Dose: 0, 5000, 10000 ppm Exposure time: 103 wk Number of exposures: 6 Hr/d, 5 d/wk Lowest observable effect level: 5000 ppm Not classified due to data which are conclusive although insufficient for classification.
Genotoxicity in vitro	
Ethylene	: Test Type: Ames test Test system: TA100 Metabolic activation: with and without metabolic activation
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	Method: OECD Test Guideline 471 Result: negative
	Test Type: Chromosome aberration test in vitro Test system: Chinese hamster ovary cells Metabolic activation: with and without metabolic activation Method: OECD Test Guideline 473 Result: negative
Propylene	Test Type: Ames test Metabolic activation: with and without metabolic activation Method: OECD Test Guideline 471 Result: negative
	Test Type: Mammalian cell gene mutation assay Metabolic activation: with and without metabolic activation Method: OECD Test Guideline 476 Result: Ambiguous
Genotoxicity in vivo	
Ethylene	: Test Type: Micronucleus test Species: Rat Route of Application: inhalation (gas) Exposure time: 5 days and 13 weeks Dose: 10000 ppm Result: negative
	Test Type: Micronucleus test Species: Rat Route of Application: inhalation (gas) Exposure time: 4 weeks Dose: 40, 1000, 3000 ppm Method: OECD Test Guideline 474 Result: negative
Propylene	Test Type: Micronucleus test Species: Rat Route of Application: inhalation (gas) Method: OECD Test Guideline 474 Result: negative
Carcinogenicity	
Ethylene	: Species: Rat Dose: 0. 300, 1000, 3000 ppm Exposure time: 2 yrs Number of exposures: 6 h/d, 5 d/wk Remarks: no increase incidence of tumors
Propylene	Species: Rat Dose: 0, 5000, 10000 ppm Exposure time: 103 wks Number of exposures: 6 h/d, 5 d/wk Remarks: No evidence of carcinogenicity
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	Species: Mouse Dose: 0, 5000, 10000 ppm Exposure time: 103 wks Number of exposures: 6 h/d, 5 d/wk Remarks: No evidence of carcinogenicity
Reproductive toxicity	
Ethane	 Species: Rat Sex: male and female Application Route: Inhalation Dose: 0, 1600, 5000, 16000 ppm Exposure time: 6 weeks Number of exposures: 6 hours/day, 7 days/week Test period: 6 weeks Test substance: yes Method: OECD Guideline 422 NOAEL Parent: 16000 ppm NOAEL F1: 16000 ppm no abnormalities observed
Ethylene	Species: Rat Application Route: Inhalation Dose: 0. 200, 1000, 5000 ppm Number of exposures: 6 h/d NOAEL Parent: 5000 ppm NOAEL F1: 5000 ppm no abnormalities observed
Propylene	Species: Rat Sex: male and female Application Route: Inhalation Dose: 0, 5000, 10000 ppm Number of exposures: 6 hrs/d, 5 d/wk Test period: 103 wks NOAEL Parent: 10000 ppm
	Species: Mouse Sex: male and female Application Route: Inhalation Dose: 0, 5000, 10000 ppm Number of exposures: 6 hrs/d, 5 d/wk Test period: 103 wks NOAEL Parent: 10000 ppm
Developmental Toxicity	
Ethylene	 Species: Rat Application Route: Inhalation Dose: 0. 200, 1000, 5000 ppm Number of exposures: 6 h/d NOAEL Teratogenicity: 5000 ppm NOAEL Maternal: 5000 ppm No toxicity to reproduction Animal testing did not show any effects on fertility.
Propylene	Species: Rat Application Route: Inhalation Dose: 0, 200, 1000, 10000 ppm

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	Number of exposures: 6 hrs/d Test period: 14 d Method: OECD Guideline 414 NOAEL Teratogenicity: 10000 ppm NOAEL Maternal: 10000 pmm
Acetylene Aspiration toxicity	: No aspiration toxicity classification.
CMR effects	
Dimethylformamide	: Reproductive toxicity: Clear evidence of adverse effects on development, based on animal experiments.
Ethane	Carcinogenicity: Weight of evidence does not support classification as a carcinogen Mutagenicity: In vitro tests did not show mutagenic effects Teratogenicity: No evidence of adverse effects on sexual function and fertility, or on development, based on animal experiments. Reproductive toxicity: Weight of evidence does not support classification for reproductive toxicity
Propylene	Carcinogenicity: Animal testing did not show any carcinogenic effects. Mutagenicity: Tests on bacterial or mammalian cell cultures did not show mutagenic effects. Teratogenicity: Animal testing did not show any effects on fetal development. Reproductive toxicity: Animal testing did not show any effects on fertility.
Acetylene Further information	: No data available.
CTION 12: Ecological infor	mation
Toxicity to fish Dimethylformamide	: LC50: 7,100 mg/l Exposure time: 96 h Species: Lepomis macrochirus (Bluegill sunfish)
Propylene	No data available
Toxicity to daphnia and o	other aquatic invertebrates
Dimethylformamide	: EC50: 13,100 mg/l Exposure time: 48 h Species: Daphnia magna (Water flea)
Toxicity to algae	

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Dimethylformamide	: EC50: > 1,000 mg/l Exposure time: 96 h Species: Desmodesmus subspicatus (green algae)
Biodegradability	: This material is volatile and is expected to partition to air.
Elimination information (persis	tence and degradability)
Bioaccumulation	: No data available
Mobility	: Disperses rapidly in air.
Results of PBT assessment	: This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.
Additional ecological information	: This material is not expected to be harmful to aquatic organisms.
	No data available
Ecotoxicology Assessment	
Short-term (acute) aquatic hazard	: This material is not expected to be harmful to aquatic organisms.
Long-term (chronic) aquatic hazard	: This material is not expected to be harmful to aquatic organisms.
ECTION 13: Disposal considera	tions
The information in this SDS pe	ertains only to the product as shipped.
may meet the criteria of a haze other State and local regulatio regulated components may be	urpose or recycle if possible. This material, if it must be discarded, ardous waste as defined by US EPA under RCRA (40 CFR 261) or ns. Measurement of certain physical properties and analysis for e necessary to make a correct determination. If this material is te, federal law requires disposal at a licensed hazardous waste
Product	: Do not dispose of waste into sewer. Do not contaminate ponds, waterways or ditches with chemical or used container. Send to a licensed waste management company.
Contaminated packaging	: Empty remaining contents. Dispose of as unused product. Do not re-use empty containers. Do not burn, or use a cutting torch on, the empty drum.
ECTION 14: Transport informat	ion
	hown here are for bulk shipments only, and may not apply to ages (see regulatory definition).
	stic or international mode-specific and quantity-specific Dangerous nal shipping description requirements (e.g., technical name or names
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	nation shown here, may not always agree with the I. Flashpoints for the material may vary slightly b	
UN1001, ACETYLENE	S DEPARTMENT OF TRANSPORTATION) , DISSOLVED, 2.1 authorized for transport, but acetylene liquefied is	s forbidden for transport.
UN1001, ACETYLENE	DNAL MARITIME DANGEROUS GOODS) , DISSOLVED, 2.1, (-17.7 °C c.c.) authorized for transport, but acetylene liquefied is	s forbidden for transport.
UN1001, ACETYLENE	AIR TRANSPORT ASSOCIATION) , DISSOLVED, 2.1 authorized for transport, but acetylene liquefied is	s forbidden for transport.
UN1001, ACETYLENE	DANGEROUS GOODS BY ROAD (EUROPE)) , DISSOLVED, 2.1, (B/D) authorized for transport, but acetylene liquefied is	s forbidden for
DANGEROUS GOODS (E 239,UN1001,ACETYLE		
OF DANGEROUS GOOD UN1001, ACETYLENE	EMENT CONCERNING THE INTERNATIONAL S BY INLAND WATERWAYS) , DISSOLVED, 2.1 authorized for transport, but acetylene liquefied is	
	Ik according to IMO instruments	
SECTION 15: Regulatory info	rination	
National legislation		
SARA 311/312 Hazards	: Flammable (gases, aerosols, liquids, or so Gases under pressure Reproductive toxicity	lids)
CERCLA Reportable Quantity	: 3333 lbs Dimethylformamide	
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SARA 302 Reportable Quantity	: This material does not contain any components with a SARA 302 RQ.
SARA 302 Threshold Planning Quantity	: This material does not contain any components with a section 302 EHS TPQ.
SARA 304 Reportable Quantity	: This material does not contain any components with a section 304 EHS RQ.
SARA 313 Components	: The following components are subject to reporting levels established by SARA Title III, Section 313:
	: Dimethylformamide - 68-12-2 Ethylene - 74-85-1 Propylene - 115-07-1
Clean Air Act	
Potential Class	product neither contains, nor was manufactured with a Class I or II ODS as defined by the U.S. Clean Air Act Section 602 (40 CFR ubpt. A, App.A + B).
	e listed as HAP under the U.S. Clean Air Act, Section 112 (40 CFR 61): : Dimethylformamide - 68-12-2
The following chemical(s) ar Release Prevention (40 CFF	e listed under the U.S. Clean Air Act Section 112(r) for Accidental & 68.130, Subpart F): : Acetylene - 74-86-2 Ethane - 74-84-0 Ethylene - 74-85-1 Propylene - 115-07-1
The following chemical(s) ar Final VOC's (40 CFR 60.489	e listed under the U.S. Clean Air Act Section 111 SOCMI Intermediate c)): : Acetylene - 74-86-2 Dimethylformamide - 68-12-2 Ethylene - 74-85-1
US State Regulations	Ethylene - 74-85-1 Propylene - 115-07-1

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Dir Etł Etł Pro	etylene - 74-86-2 nethylformamide - 68-12-2 nane - 74-84-0 nylene - 74-85-1 opylene - 115-07-1 ARNING! This product contains a chemical known in the
Components St	ate of California to cause cancer. Dimethylformamide 68-12-2
Notification status Europe REACH Switzerland CH INV United States of America (USA) TSCA Canada DSL Australia AIIC New Zealand NZIoC Japan ENCS Korea KECI Philippines PICCS Taiwan TCSI China IECSC Other SECTION 16: Other information	 Not in compliance with the inventory Not in compliance with the inventory On or in compliance with the active portion of the TSCA inventory All components of this product are on the Canadian DSL On the inventory, or in compliance with the inventory On the inventory, or in compliance with the inventory On the inventory, or in compliance with the inventory Not in compliance with the inventory On the inventory, or in compliance with the inventory On the inventory, or in compliance with the inventory On the inventory, or in compliance with the inventory On the inventory, or in compliance with the inventory On the inventory, or in compliance with the inventory On the inventory, or in compliance with the inventory On the inventory, or in compliance with the inventory Not in compliance with the inventory
Fi	e Hazard: 0 e Hazard: 4 eactivity Hazard: 3
Further information	
Legacy SDS Number : 90)7
Significant changes since the last v previous versions.	ersion are highlighted in the margin. This version replaces all
The information in this SDS pertain	s only to the product as shipped.
information and belief at the date of guidance for safe handling, use, pro	ety Data Sheet is correct to the best of our knowledge, its publication. The information given is designed only as a processing, storage, transportation, disposal and release and is
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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.

۴	Key or legend to abbreviations and a	cronyms use	d in the safety data sheet
ACGIH	American Conference of Government Industrial Hygienists	LD50	Lethal Dose 50%
AIIC	Australian Inventory of Industrial Chemicals	LOAEL	Lowest Observed Adverse Effect Level
DSL	Canada, Domestic Substances List	NFPA	National Fire Protection Agency
NDSL	Canada, Non-Domestic Substances List	NIOSH	National Institute for Occupational Safety & Health
CNS	Central Nervous System	NTP	National Toxicology Program
CAS	Chemical Abstract Service	NZIoC	New Zealand Inventory of Chemicals
EC50	Effective Concentration	NOAEL	No Observable Adverse Effect Level
EC50	Effective Concentration 50%	NOEC	No Observed Effect Concentration
EGEST	EOSCA Generic Exposure Scenario Tool	OSHA	Occupational Safety & Health Administration
EOSCA	European Oilfield Specialty Chemicals Association	PEL	Permissible Exposure Limit
EINECS	European Inventory of Existing Chemical Substances	PICCS	Philippines Inventory of Commercial Chemical Substances
MAK	Germany Maximum Concentration Values	PRNT	Presumed Not Toxic
GHS	Globally Harmonized System	RCRA	Resource Conservation Recovery Act
>=	Greater Than or Equal To	STEL	Short-term Exposure Limit
IC50	Inhibition Concentration 50%	SARA	Superfund Amendments and Reauthorization Act.
IARC	International Agency for Research on Cancer	TLV	Threshold Limit Value
IECSC	Inventory of Existing Chemical Substances in China	TWA	Time Weighted Average
ENCS	Japan, Inventory of Existing and New Chemical Substances	TSCA	Toxic Substance Control Act
KECI	Korea, Existing Chemical Inventory	UVCB	Unknown or Variable Composition Complex Reaction Products, and Biological Materials
<=	Less Than or Equal To	WHMIS	Workplace Hazardous Materials Information System
LC50	Lethal Concentration 50%	ATE	Acute toxicity estimate

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