SAFETY DATA SHEET



HE® 100 Polymer

Version 1.10

Revision Date 2025-05-14

		, Regulation (EC) No. 2020/878					
SECTION 1: Identification	of the substance	e/mixture and of the company/undertaking					
1.1							
Product information							
Product Name		00 Polymer					
MaterialEC-No.Registration nu	umber	6, 1016934					
Chemical name	CAS-No. EC-No. Index No.	Legal Entity Registration number					
Acrylamide	79-06-1 201-173-7 616-003-00-0	Chevron Phillips Chemicals International NV 01-2119463260-48-0011					
2-Acrylamido-2- Methylpropane Sulfonic Acid, Sodium Salt	5165-97-9 225-948-4	Chevron Phillips Chemicals International NV 01-2119495270-39-0016					
1.2 Relevant identified uses of the substance or mixture and uses advised against Use : Completion Fluid Additive							
Relevant Identified Use Supported 1.3							
	3 Details of the supplier of the safety data sheet						
Company	Drilling 9500 La	n Phillips Chemical Company LP Specialties Company LLC akeside Blvd. podlands, TX 77381					
Local	Airport	-					
	Respor	equests: (800) 852-5530 nsible Party: Product Safety Group .ds@cpchem.com					
1.4							
Emergency telephone	:						
Health:							
SDS Number:10000006828	3	1/13					

Revision Date 2025-05-14

Version 1.10

866.442.9628 (North America) 1.832.813.4984 (International) Transport: CHEMTREC 800.424.9300 or 703.527.3887(int'l) Asia: CHEMWATCH (+612 9186 1132) China: 0532 8388 9090 Mexico CHEMTREC 01-800-681-9531 (24 hours) South America SOS-Cotec Inside Brazil: 0800.111.767 Outside Brazil: +55.19.3467.1600 Argentina: +(54)-1159839431 EUROPE: BIG +32.14.584545 (phone) or +32.14583516 (telefax) Austria: VIZ +43 1 406 43 43 (24 hours/day, 7 days/week) Belgium: 070 245 245 (24 hours/day, 7 days/week) Bulgaria: +359 2 9154 233 Croatia: +3851 2348 342 (24 hours/day, 7 days/week) Cyprus: 1401 Czech Republic: Toxicological Information Center +420 224 919 293, +420 224 915 402 Denmark: Danish Poison Center (Giftlinjen): +45 8212 1212 Estonia: BIG +32.14.584545 (phone) or +32.14583516 (telefax) Finland: 0800 147 111 09 471 977 (24 hours/day) France: ORFILA number (INRS): + 33 (0) 1 45 42 59 59 (24 hours/day, 7 days/week) Germany: BIG +32.14.584545 (phone) or +32.14583516 (telefax) Greece: (0030) 2107793777 (24 hours/day, 7 days/week) Hungary: +36-80-201-199 (24 hours/day, 7 days/week) Iceland: 543 2222 (24 hours/day, 7 days/week) Ireland: BIG +32.14.584545 (phone) or +32.14583516 (telefax) Italy: POISON CENTER MILAN - Azienda Ospedaliera Niguarda Ca` Grande Tel. +39 02 66101029; POISON CENTER ROME - Policlinico "Agostino Gemelli", Servizio di tossicologia clinica Tel. +39 06 3054343; POISON CENTER ROME - Ospedale Pediatrico Bambino Gesù Tel. +39 06 68593726; POISON CENTER ROME – Policlinico "Umberto I" Tel. +39 06 4997 8000; POISON CENTER FOGGIA - Azienda Ospedaliera Universitaria Riuniti Tel. +39 0881 732326; POISON CENTER NAPLES – Azienda Ospedaliera "Antonio Cardarelli" Tel. +39 081 7472870; POISON CENTER FLORENCE - Azienda Ospedaliera universitaria Careggi Tel. +39 055 7947819; POISON CENTER PAVIA - IRCCS Fondazione Salvatore Maugeri Tel. +39 0382 24444; POISON CENTER BERGAMO – Azienda Ospedaliera "Papa Giovanni XXIII" Tel. 800 883 300; POISON CENTER VERONA - Azienda Ospedaliera Universitaria integrata Tel. 800 011 858; Latvia: State Fire and Rescue Service, phone number: 112; Toxicology and Sepsis Clinic Poisoning and Drug Information Center, Hipokrāta 2, Riga, Latvia, LV-1038, phone number +371 67042473. (24 hours.) Liechtenstein: BIG +32.14.584545 (phone) or +32.14583516 (telefax) Lithuania: +370 (85) 2362052 Luxembourg: (+352) 8002 5500 (24 hours/day, 7 days/week) Malta: +356 2395 2000 The Netherlands: NVIC: +31 (0)88 755 8000 Norway: 22 59 13 00 (24 hours/day, 7 days/week) Poland: BIG +32.14.584545 (phone) or +32.14583516 (telefax) Portugal: CIAV phone number: +351 800 250 250 Romania: +40213183606 Slovakia: +421 2 5477 4166 Slovenia: Phone number: 112 Spain: National Emergency Telephone Number of Spanish Poison Centre: +34 91 562 04 20 (24 hours/day, 7 days/week) Sweden: 112 - ask for Poisons Information Responsible Department : Product Safety and Toxicology Group E-mail address : SDS@CPChem.com Website • www.CPChem.com SDS Number:10000068283 2/13

Version 1.10

SAFETY DATA SHEET

Revision Date 2025-05-14

2.1

Classification of the substance or mixture REGULATION (EC) No 1272/2008

Not a hazardous substance or mixture.

2.2

Labeling (REGULATION (EC) No 1272/2008)

Not a hazardous substance or mixture.

2.3

 Other hazards Results of PBT and vPvB : 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.
Endocrine disrupting properties	The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

SECTION 3: Composition/information on ingredients

Synonyms		None Established
Molecular formula		Polymer
Contains no hazardous ingredients according to GHS. :		
Remarks		: Contains no hazardous ingredients according to GHS.

SECTION 4: First aid measures

4.1	Description of first-aid measures		
	General advice	:	No hazards which require special first aid measures.
	If inhaled	:	If unconscious, place in recovery position and seek medical advice. If symptoms persist, call a physician.
	In case of eye contact	:	Remove contact lenses. Protect unharmed eye. If eye irritation persists, consult a specialist.
	If swallowed	:	Keep respiratory tract clear. Do not give milk or alcoholic beverages. Never give anything by mouth to an unconscious
SDS	S Number:100000068283		3/13

Version 4.2 Mos Note Sym 4.3 India Trea SECTIO Flas Auto 5.1 Exti Suit med 5.2 Spe figh 5.3 Adv Spe equ Furt	st important symptoms a es to physician inptoms ks ication of any immediate atment IN 5: Firefighting measur sh point oignition temperature :inguishing media table extinguishing dia ecial hazards arising from ecific hazards during fire	: me : :	Revision Date 2025-05-14 person. If symptoms persist, call a physician. effects, both acute and delayed No data available. No data available. edical attention and special treatment needed No data available. Not applicable No data available Avoid the use of straight streams that may create a dust cloud and the risk of a dust explosion.
4.2 Mos Note Sym 4.3 India Trea SECTIO 5.1 Exti Suit med 5.2 Spe figh 5.3 Adv Spe equ Furt	st important symptoms a es to physician inptoms ks ication of any immediate atment IN 5: Firefighting measur sh point oignition temperature :inguishing media table extinguishing dia ecial hazards arising from ecific hazards during fire	: me : :	person. If symptoms persist, call a physician. effects, both acute and delayed No data available. No data available. edical attention and special treatment needed No data available. Not applicable No data available Avoid the use of straight streams that may create a dust cloud and the risk of a dust explosion.
Note Sym 4.3 Risk 4.3 India Trea SECTIO Flas Auto 5.1 Exti Suit med 5.2 Spe figh 5.3 Adv Spe equ Furt	es to physician nptoms ks ication of any immediate atment N 5: Firefighting measur sh point oignition temperature inguishing media table extinguishing dia ecial hazards arising from ecific hazards during fire	: me : :	No data available. No data available. edical attention and special treatment needed No data available. Not applicable No data available Avoid the use of straight streams that may create a dust cloud and the risk of a dust explosion.
Note Sym 4.3 Risk 4.3 India Trea SECTIO Flas Auto 5.1 Exti Suit med 5.2 Spe figh 5.3 Adv Spe equ Furt	es to physician nptoms ks ication of any immediate atment N 5: Firefighting measur sh point oignition temperature inguishing media table extinguishing dia ecial hazards arising from ecific hazards during fire	: me : :	No data available. No data available. edical attention and special treatment needed No data available. Not applicable No data available Avoid the use of straight streams that may create a dust cloud and the risk of a dust explosion.
4.3 India Trea SECTIO Flas Auto 5.1 Exti Suit med 5.2 Spe figh 5.3 Adv Spe equ Furt	ks ication of any immediate atment IN 5: Firefighting measur sh point oignition temperature inguishing media table extinguishing dia	: : :	No data available. edical attention and special treatment needed No data available. Not applicable No data available Avoid the use of straight streams that may create a dust cloud and the risk of a dust explosion.
4.3 India Trea SECTIO Flas Auto 5.1 Exti Suit med 5.2 Spe figh 5.3 Adv Spe equ Furt	ication of any immediate atment IN 5: Firefighting measur sh point oignition temperature inguishing media table extinguishing dia ecial hazards arising from ecific hazards during fire	: : :	Avoid the use of straight streams that may create a dust cloud and the risk of a dust explosion.
SECTIO Flas Auto 5.1 Exti Suit med 5.2 Spe fight 5.3 Adv Spe equ Furt	N 5: Firefighting measur sh point oignition temperature inguishing media table extinguishing dia ecial hazards arising from ecific hazards during fire	:	Not applicable No data available Avoid the use of straight streams that may create a dust cloud and the risk of a dust explosion.
Flas Auto 5.1 Exti Suit med 5.2 Spe figh 5.3 Adv Spe equ Furt	sh point oignition temperature :inguishing media table extinguishing dia ecial hazards arising fror ecific hazards during fire	:	No data available Avoid the use of straight streams that may create a dust cloud and the risk of a dust explosion.
Auto 5.1 Exti Suit mec 5.2 Spe fight 5.3 Adv Spe equ Furt	oignition temperature inguishing media table extinguishing dia ecial hazards arising fror ecific hazards during fire		No data available Avoid the use of straight streams that may create a dust cloud and the risk of a dust explosion.
5.1 Extinued Suit med 5.2 Spe fight 5.3 Adv Spe equ Furt	table extinguishing dia ecial hazards arising fror ecific hazards during fire		Avoid the use of straight streams that may create a dust cloud and the risk of a dust explosion.
5.2 Spe fight 5.3 Adv Spe equ Furt	table extinguishing dia ecial hazards arising fror ecific hazards during fire		and the risk of a dust explosion.
5.2 5.3 5.3 Furt	dia ecial hazards arising fror ecific hazards during fire		and the risk of a dust explosion.
Spe figh 5.3 Adv Spe equ Furt	ecific hazards during fire	n tł	ha substance or mixture
Adv Spe equ Furt		:	Risks of ignition followed by flame propagation or secondary explosions shall be prevented by avoiding accumulation of dust, e.g. on floors and ledges.
Fire	vice for firefighters ecial protective lipment for fire-fighters	:	Wear self-contained breathing apparatus for firefighting if necessary.
	ther information	:	Standard procedure for chemical fires. Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
	e and explosion tection	:	Avoid generating dust; fine dust dispersed in air in sufficient concentrations, and in the presence of an ignition source is a potential dust explosion hazard. Provide appropriate exhaust ventilation at places where dust is formed.
	zardous decomposition ducts	:	Carbon Dioxide. Carbon oxides.
SECTIO	N 6: Accidental release r	mea	asures
6.1 Per	sonal precautions, prote	ecti	ve equipment and emergency procedures
	sonal precautions	:	Avoid dust formation.
6.2 Env			
	vironmental precautions	:	No special environmental precautions required.
SDS Nur	vironmental precautions		

HF	® 100 Polymer		SAFETY DATA SHEET
	sion 1.10		Revision Date 2025-05-14
6.3			
	Methods and materials for control Methods for cleaning up	on :	tainment and cleaning up Pick up and arrange disposal without creating dust. Clean up promptly by sweeping or vacuum. Keep in suitable, closed containers for disposal.
	Additional advice	:	Contaminated surfaces will be extremely slippery. Avoid spillage on floor as the product can become very slippery when wet. Sweep up to prevent slipping hazard.
6.4	Reference to other sections		
	Reference to other sections	:	For personal protection see section 8. For disposal considerations see section 13.
SEC	TION 7: Handling and storag	е	
7 4			
7.1	Precautions for safe handlin Handling	g	
	Advice on safe handling	:	For personal protection see section 8. Smoking, eating and drinking should be prohibited in the application area. Electrostatic charge may accumulate and create a hazardous condition when handling this material. To minimize this hazard, bonding and grounding may be necessary, but may not by themselves be sufficient. Potentially toxic/irritating fumes may be evolved from heated material.
	Advice on protection against fire and explosion	:	Avoid generating dust; fine dust dispersed in air in sufficient concentrations, and in the presence of an ignition source is a potential dust explosion hazard. Provide appropriate exhaust ventilation at places where dust is formed.
7.2	Conditions for safe storage,	in	cluding any incompatibilities
	Storage		
	Requirements for storage areas and containers	:	Electrical installations / working materials must comply with the technological safety standards.
	Advice on common storage	:	No materials to be especially mentioned.
	Use	:	Completion Fluid Additive
SEC	TION 8: Exposure controls/p	er	sonal protection
8.2	Exposure controls Engineering measures		
		ai	rborned concentrations below the exposure guidelines/limits.
SDS	Number:100000068283		5/13

٦

Version 1.10

Revision Date 2025-05-14

Consider the potential hazards of this material (see Section 2), applicable exposure limits, job activities, and other substances in the work place when designing engineering controls and selecting personal protective equipment. If engineering controls or work practices are not adequate to prevent exposure to harmful levels of this material, the personal protective equipment listed below is recommended. The user should read and understand all instructions and limitations supplied with the equipment since protection is usually provided for a limited time or under certain circumstances.

Personal protective equipment

Respiratory protection	:	If ventilation or other engineering controls are not adequate to maintain minimal oxygen content of 19.5% by volume under normal atmospheric pressure, a supplied-air NIOSH approved respirator may be appropriate. A positive pressure, air- supplying respirator may be appropriate if there is potential for uncontrolled release, aerosolization, exposure levels are not known, or other circumstances where air-purifying respirators may not provide adequate protection.
Hand protection	:	The suitability for a specific workplace should be discussed with the producers of the protective gloves. Please observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves. Also take into consideration the specific local conditions under which the product is used, such as the danger of cuts, abrasion, and the contact time. Gloves should be discarded and replaced if there is any indication of degradation or chemical breakthrough.
Eye protection	:	Eye wash bottle with pure water. Safety glasses.
Skin and body protection	:	Choose body protection in relation to its type, to the concentration and amount of dangerous substances, and to the specific work-place. Wear as appropriate:. Protective suit. Safety shoes.
Hygiene measures	:	General industrial hygiene practice.

SECTION 9: Physical and chemical properties

9.1

9.1				
Inforn	nation on basic physical	l a	nd chemical properties	
Арреа	arance			
Color Odor		:	solid White no odor Not applicable	
Safety	v data			
Flash	point	:	Not applicable	
Lower	explosion limit	:	Not applicable	
Upper	explosion limit	:	Not applicable	
Oxidiz	ing properties	:	No	
SDS Numb	er:100000068283			6/13

Version 1.10

SAFETY DATA SHEET

Revision Date 2025-05-14

Autoignition temperature	: No data available
Thermal decomposition	: No data available
Molecular formula	: Polymer
Molecular weight	: No data available
рН	: Not applicable
Pour point	: Not applicable
Melting point/ range	Not applicable
Boiling point/boiling range	: Not applicable
Vapor pressure	: Not applicable
Relative density	: 1,39 at 16 °C (61 °F)
Density	: 58 LB/FT3
Water solubility	: soluble
Partition coefficient: n- octanol/water	: No data available
Solubility in other solvents	: 4,81 g/l at 20°C (68°F) Medium: Water Method: OECD Test Guideline 120
Viscosity, kinematic	: Not applicable
Relative vapor density	: Not applicable
Evaporation rate	: Not applicable
Dust deflagration index Kst	: >0 m.b_/s
SECTION 10: Stability and reactive	vity
10.1	
Reactivity	: Stable at normal ambient temperature and pressure.
10.2	
SDS Number:100000068283	7/13

Revision Date 2025-05-14		
anticipated storage and handling conditions of temperature and pressure.		
actions		
: Further information: Stable under recommended storage conditions., No hazards to be specially mentioned.		
: Generation of Dusts.		
: May react with oxygen and strong oxidizing agents, such as chlorates, nitrates, peroxides, etc.		
: No data available		
: Carbon Dioxide Carbon oxides		
: No decomposition if stored and applied as directed.		
mation		
11.1 Information on toxicological effects		
: LD50: > 5.000 mg/kg Species: Rat		
: No data available		
: No data available		
: No skin irritation		
: No eye irritation		
: No aspiration toxicity classification.		
ls		
8/13		

HE® 100 Polymor	SAFETY DATA SHEET
HE® 100 Polymer	
Version 1.10	Revision Date 2025-05-14
Further information	 Product dust may be irritating to eyes, skin and respiratory system.
Endocrine disrupting properties	 The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.
SECTION 12: Ecological informa	tion
<u></u>	
12.1 Toxicity	
Ecotoxicity effects	
Toxicity to fish	: This material is not expected to be harmful to aquatic organisms.
Toxicity to daphnia and other aquatic invertebrates	: This material is not expected to be harmful to aquatic organisms.
Toxicity to algae	: This material is not expected to be harmful to aquatic organisms.
12.2 Persistence and degradabili	ty
Biodegradability	: This material is not expected to be readily biodegradable.
12.3 Bioaccumulative potential Elimination information (persis	tence and degradability)
Bioaccumulation	: Bioaccumulation is unlikely.
12.4 Mobility in soil	
Mobility	: No data available
12.5 Results of PBT and vPvB as Results of PBT assessment	 sessment 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.
12.6 Endocrine disrupting proper	ties
Endocrine disrupting properties	 The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.
SDS Number:100000068283	9/13

Version 1.10

Revision Date 2025-05-14

12.7	Other adverse effects						
	Additional ecological information	:	This material is not expected to be harmful to aquatic organisms.				
12.8	Additional Information						
	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.				
SEC	SECTION 13: Disposal considerations						

13.1

Waste treatment methods

The information in this SDS pertains only to the product as shipped.

Use material for its intended purpose or recycle if possible. This material, if it must be discarded, may meet the criteria of a hazardous waste as defined by US EPA under RCRA (40 CFR 261) or other State and local regulations. Measurement of certain physical properties and analysis for regulated components may be necessary to make a correct determination. If this material is classified as a hazardous waste, federal law requires disposal at a licensed hazardous waste disposal facility.

Contaminated packaging

: Empty containers should be taken to an approved waste handling site for recycling or disposal.

SECTION 14: Transport information

14.1 - 14.7

Transport information

The shipping descriptions shown here are for bulk shipments only, and may not apply to shipments in non-bulk packages (see regulatory definition).

Consult the appropriate domestic or international mode-specific and quantity-specific Dangerous Goods Regulations for additional shipping description requirements (e.g., technical name or names, etc.) Therefore, the information shown here, may not always agree with the bill of lading shipping description for the material. Flashpoints for the material may vary slightly between the SDS and the bill of lading.

US DOT (UNITED STATES DEPARTMENT OF TRANSPORTATION) NOT REGULATED AS A HAZARDOUS MATERIAL OR DANGEROUS GOODS FOR TRANSPORTATION BY THIS AGENCY.

IMO / IMDG (INTERNATIONAL MARITIME DANGEROUS GOODS)

NOT REGULATED AS A HAZARDOUS MATERIAL OR DANGEROUS GOODS FOR TRANSPORTATION BY THIS AGENCY.

SDS Number:100000068283

10/13

SAFETY DATA SHEET

HE® 100 Polymer

Version 1.10

Revision Date 2025-05-14

IATA (INTERNATIONAL AIR TR NOT REGULATED AS A HAZ TRANSPORTATION BY THIS	ARDOUS MATERIAL OR DANGEROUS GOODS FOR									
	ROUS GOODS BY ROAD (EUROPE)) ARDOUS MATERIAL OR DANGEROUS GOODS FOR AGENCY.									
DANGEROUS GOODS (EUROP	ARDOUS MATERIAL OR DANGEROUS GOODS FOR									
OF DANGEROUS GOODS BY IN NOT REGULATED AS A HAZ	ADN (EUROPEAN AGREEMENT CONCERNING THE INTERNATIONAL CARRIAGE OF DANGEROUS GOODS BY INLAND WATERWAYS) NOT REGULATED AS A HAZARDOUS MATERIAL OR DANGEROUS GOODS FOR TRANSPORTATION BY THIS AGENCY.									
Maritime transport in bulk acco	-									
SECTION 15: Regulatory informatio	n									
15.1 Safety, health and environment National legislation	tal regulations/legislation specific for the substance or mixture									
	20/878 of 18 June 2020 amending Regulation (EC) No 1907/2006 of he Council on the Registration, Evaluation, Authorisation and I)									
15.2										
Major Accident Hazard	96/82/EC Update: 2003 Directive 96/82/EC does not apply									
:	ZEU_SEVES3 Update: Not applicable									
Notification status Europe REACH Switzerland CH INV United States of America (USA) TSCA Australia AIIC Japan ENCS	 This product is in full compliance according to REACH regulation 1907/2006/EC. Not in compliance with the inventory On or in compliance with the active portion of the TSCA inventory On the inventory, or in compliance with the inventory On the inventory, or in compliance with the inventory 									
New Zealand NZIoC	: Not in compliance with the inventory									
SDS Number:100000068283	11/13									

Korea KECI : A substance(s) in this product was not registered, notified to be registered, or exempted from registration by CPChem according to K-REACH regulations. Importation or manufacture of this product is still permitted provided the Korean Importer of Record has themselves notified the substance or the exported amount does not exceed the minimum threshold quantity of the non-registered substance(s). Philippines PICCS : On the inventory, or in compliance with the inventory Taiwan TCSI : On the inventory, or in compliance with the inventory China IECSC CTION 16: Other information : On the inventory, or in compliance with the inventory China IECSC : On the inventory, or in compliance with the inventory China IECSC Firet Hazard: 2 : Reactivity Hazard: 0 Firet Hazard: 2 Reactivity Hazard: 0 Further information : Health Hazard: 1 Legacy SDS Number : 168830 Significant changes since the last version are highlighted in the margin. This version replaces al previous versions. The information in this SDS pertains only to the product as shipped. The information provided in this 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 i not to be considered a marranty or quality specification. The information releases only to the specific material designate and may not be valid for such material used in combination with an other material desingnet and may proces	rsion 1.10				
notified to be'registered, or exempted from registration by CPChem according to K-REACH regulations. Importation or manufacture of this product is still permitted provided the Korean Importer of Record has themselves notified the substance or the exported amount does not exceed the minimum threshold quantity of the non-registered substance (s). Philippines PICCS :: On the inventory, or in compliance with the inventory Taiwan TCSI :: On the inventory, or in compliance with the inventory China IECSC Philippines PICCS :: On the inventory, or in compliance with the inventory Taiwan TCSI :: On the inventory, or in compliance with the inventory China IECSC CTION 16: Other information : NFPA Classification :: Health Hazard: 1 Fire Hazard: 2 Reactivity Hazard: 0 Further information : Eleast 1 Legacy SDS Number : 168830 Significant changes since the last version are highlighted in the margin. This version replaces al previous versions. The information in this SDS pertains only to the product as shipped. The information in this SDS pertains only to the product as shipped. The information replaced and may not be valid for such material used in combination with an other material designated and may not be valid for such material used in combination with an other material conformero or inclose solary to the valid for such material used in combination with an other material memory or industrial Hygienistis inclose inclose solary to the conformero or inclose solary in the safety data sheet Key or			Revision Date 2025-05		
Taiwan TCSI : On the inventory, or in compliance with the inventory China IECSC : On the inventory, or in compliance with the inventory CTION 16: Other information NFPA Classification : Health Hazard: 1 Fire Hazard: 2 Reactivity Hazard: 0 Further information Legacy SDS Number : 168830 Significant changes since the last version are highlighted in the margin. This version replaces al previous versions. The information number of the product as shipped. The information provided in this 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 events with an other material designed and may not be valid for such material used in combination with an other materials or in any process, unless specified in the text. Key or legend to abbreviations and acronyms used in the safety data sheet ACGIH American Conference of LDS0 Lethal Dose 50% Government Industrial AIIC Australian Inventory of Industrial LOAEL Lowest Observed Adverse Effec Chemicals Central Nervous System NTPA National Fire Protection Agency List NDSL Canada, Non-Domestic NIOSH National Institute for Occupation Substances List ECS0 Effective Concentration NOAEL Low Mational Institute for Occupation Substances List COSCA Generic Exposure SCIA Chemical Abstract Service NZIOC New Zealand Inventory of Chemicals EGEST EOSCA Generic Exposure Science Tool	Korea KECI	:	notified to be register by CPChem accordin Importation or manuf permitted provided th themselves notified t amount does not exc	red, or exempted from registration ng to K-REACH regulations. acture of this product is still ne Korean Importer of Record has he substance or the exported seed the minimum threshold	
NFPA Classification :: Health Hazard: 1 Fire Hazard: 2 Reactivity Hazard: 0 Further information Legacy SDS Number : 1 Legacy SDS Number : 168830 Significant changes since the last version are highlighted in the margin. This version replaces al previous versions. The information in this SDS pertains only to the product as shipped. The information provided in this 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 an other materials or in any process, unless specified in the text. Key or legend to abbreviations and acronyms used in the safety data sheet ACGIH American Conference of Government Industrial Hygienists AIIC Australian Inventory of Industrial DSL Canada, Non-Domestic NIOSH NDSL Canada, Non-Domestic NIOSH NDSL Canada, Non-Domestic NIOSH NDSL Canada, Non-Domestic NIOSH NDSL Canetial Nervous System NTP NDSL Canetial Nervous Syste	Taiwan TCS	il :	On the inventory, or	in compliance with the inventory	
Fire Hazard: 2 Reactivity Hazard: 0 Further information Legacy SDS Number : 168830 Significant changes since the last version are highlighted in the margin. This version replaces al previous versions. The information in this SDS pertains only to the product as shipped. The 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 used in combination with an other materials or in any process, unless specified in the text. Key or legend to abbreviations and acronyms used in the safety data sheet ACGIH American Conference of Chemicals Questional non-Domestic NIOSH National Institute for Occupation Substances NFPA National Institute for Occupation Substances NFPA National Institute for Occupation Substances NFPA National Institute for Occupation Substances NEPA National Toxicology Program CAS Chemicals Chemicals EC50 Effective Concentration 50% NOEC No Observed Effect Level Level EC50 Effective Concentration 50% NOEC EGEST	CTION 16: Oth	ner information			
Legacy SDS Number : 168830 Significant changes since the last version are highlighted in the margin. This version replaces al previous versions. The information in this SDS pertains only to the product as shipped. The information provided in this 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 an other materials or in any process, unless specified in the text. Key or legend to abbreviations and acronyms used in the safety data sheet ACGIH American Conference of Government Industrial Hygienists AIIC Australian Inventory of Industrial LOAEL Lowest Observed Adverse Effect Level DSL Canada, Domestic Substances NFPA National Fire Protection Agency List NDSL Canada, Non-Domestic NIOSH National Institute for Occupation Substances List CAS Chemical Abstract Service NZIOC New Zealand Inventory of Chemicals EC50 Effective Concentration NOAEL No Observed Effect Level EC50 Effective Concentration 50% NOEC No Observed Effect Concentration	NFPA Class	Fire Haz	zard: 2		
Significant changes since the last version are highlighted in the margin. This version replaces al previous versions. The information in this SDS pertains only to the product as shipped. The information provided in this 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 it 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 an other materials or in any process, unless specified in the text. Key or legend to abbreviations and acronyms used in the safety data sheet ACGIH American Conference of LD50 Lethal Dose 50% Government Industrial Hygienists LOAEL Lowest Observed Adverse Effe AIIC Australian Inventory of Industrial LOAEL Lowest Observed Adverse Effe DSL Canada, Domestic Substances NFPA National Institute for Occupation 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 Observed Effect Concentration Seervable Adverse Effect Level EC50	Further info	rmation			
Significant changes since the last version are highlighted in the margin. This version replaces al previous versions. The information in this SDS pertains only to the product as shipped. The information provided in this 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 it 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 an other materials or in any process, unless specified in the text. Key or legend to abbreviations and acronyms used in the safety data sheet ACGIH American Conference of LD50 Lethal Dose 50% Government Industrial Hygienists LOAEL Lowest Observed Adverse Effe AIIC Australian Inventory of Industrial LOAEL Lowest Observed Adverse Effe DSL Canada, Domestic Substances NFPA National Institute for Occupation 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 Observed Effect Concentration Seervable Adverse Effect Level EC50		Number : 169920			
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 an other materials or in any process, unless specified in the text.Key or legend to abbreviations and acronyms used in the safety data sheet ACGIHAmerican Conference of Government Industrial HygienistsLD50Lethal Dose 50%AIICAustralian Inventory of Industrial ChemicalsLOAELLowest Observed Adverse Effe LevelDSLCanada, Domestic Substances Substances ListNFPANational Fire Protection Agency Safety & HealthCNSCentral Nervous SystemNTPNational Institute for Occupation Safety & HealthCASChemical Abstract ServiceNZIoCNew Zealand Inventory of ChemicalsEC50Effective ConcentrationNOAELNo Observed Effect LevelEC50Effective Concentration 50%NOECNo Observed Effect Concentration LevelEGESTEOSCA Generic Exposure Scenario ToolOSHAOccupational Safety & Health Administration			n are highlighted in the	e margin. This version replaces all	
AIICAustralian Inventory of Industrial ChemicalsLOAELLowest Observed Adverse Effe LevelDSLCanada, Domestic Substances ListNFPANational Fire Protection AgencyNDSLCanada, Non-Domestic Substances ListNIOSHNational Institute for Occupation Safety & HealthCNSCentral Nervous SystemNTPNational Toxicology ProgramCASChemical Abstract ServiceNZIOCNew Zealand Inventory of ChemicalsEC50Effective ConcentrationNOAELNo Observable Adverse Effect LevelEGESTEOSCA Generic Exposure Scenario ToolOSHAOccupational Safety & Health	previous vers The informat The informat	sions. ion in this SDS pertains only ion provided in this Safety D	to the product as shi	oped. the best of our knowledge,	
DSLCanada, Domestic Substances ListNFPANational Fire Protection AgencyNDSLCanada, Non-Domestic Substances ListNIOSHNational Institute for Occupation Safety & HealthCNSCentral Nervous SystemNTPNational Toxicology ProgramCASChemical Abstract ServiceNZloCNew Zealand Inventory of ChemicalsEC50Effective ConcentrationNOAELNo Observable Adverse Effect LevelEC50Effective Concentration 50%NOECNo Observed Effect Concentration Administration	previous vers The informat information a guidance for not to be con specific mate other materia	sions. ion in this SDS pertains only ion provided in this Safety D and belief at the date of its pu safe handling, use, processi isidered a warranty or quality erial designated and may not als or in any process, unless Key or legend to abbreviation American Conference of	to the product as shi ata Sheet is correct to ublication. The informa- ing, storage, transport y specification. The in be valid for such mat specified in the text.	opped. to the best of our knowledge, ation given is designed only as a tation, disposal and release and is formation relates only to the terial used in combination with any d in the safety data sheet	
NDSLCanada, Non-Domestic Substances ListNIOSHNational Institute for Occupation Safety & HealthCNSCentral Nervous SystemNTPNational Toxicology ProgramCASChemical Abstract ServiceNZloCNew Zealand Inventory of ChemicalsEC50Effective ConcentrationNOAELNo Observable Adverse Effect LevelEC50Effective Concentration 50%NOECNo Observed Effect ConcentrationEGESTEOSCA Generic Exposure Scenario ToolOSHAOccupational Safety & Health Administration	previous vers The informat information a guidance for not to be con specific mate other materia	sions. ion in this SDS pertains only ion provided in this Safety D and belief at the date of its pu- safe handling, use, processi- sidered a warranty or quality erial designated and may not als or in any process, unless Key or legend to abbreviation American Conference of Government Industrial Hyg Australian Inventory of Indu	to the product as shi ata Sheet is correct to ublication. The informa- ing, storage, transport y specification. The in be valid for such mat specified in the text.	oped. the best of our knowledge, ation given is designed only as a tation, disposal and release and is formation relates only to the terial used in combination with any d in the safety data sheet Lethal Dose 50% Lowest Observed Adverse Effect	
CNS Central Nervous System NTP National Toxicology Program CAS Chemical Abstract Service NZloC New Zealand Inventory of Chemicals EC50 Effective Concentration NOAEL No Observable Adverse Effect Level EC50 Effective Concentration 50% NOEC No Observed Effect Concentrate Scenario Tool	previous vers The informat The informat information a guidance for not to be con specific mate other materia	sions. ion in this SDS pertains only ion provided in this Safety D and belief at the date of its pu- safe handling, use, processi- isidered a warranty or quality erial designated and may not als or in any process, unless <u>Key or legend to abbreviation</u> <u>American Conference of Government Industrial Hyg</u> <u>Australian Inventory of Indu- Chemicals</u> <u>Canada, Domestic Substar</u>	to the product as shi ata Sheet is correct to ublication. The informa- ing, storage, transport y specification. The in be valid for such mat specified in the text. <u>Is and acronyms used</u> LD50 ienists ustrial LOAEL	oped. the best of our knowledge, ation given is designed only as a tation, disposal and release and is formation relates only to the terial used in combination with any d in the safety data sheet Lethal Dose 50% Lowest Observed Adverse Effect	
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 Concentrate EGEST EOSCA Generic Exposure Scenario Tool OSHA Occupational Safety & Health Administration	previous vers The informat The informat information a guidance for not to be con specific mate other materia	sions. ion in this SDS pertains only ion provided in this Safety D ind belief at the date of its pu- safe handling, use, processi- isidered a warranty or quality erial designated and may not als or in any process, unless Key or legend to abbreviation American Conference of Government Industrial Hyg Australian Inventory of Indu Chemicals Canada, Domestic Substar List Canada, Non-Domestic	to the product as shi ata Sheet is correct to ublication. The informa- ing, storage, transport y specification. The in be valid for such mat specified in the text. <u>Is and acronyms used</u> <u>LD50</u> ienists ustrial LOAEL nces NFPA	oped. the best of our knowledge, ation given is designed only as a tation, disposal and release and is formation relates only to the terial used in combination with any d in the safety data sheet Lethal Dose 50% Lowest Observed Adverse Effect Level National Fire Protection Agency National Institute for Occupationa	
EC50 Effective Concentration NOAEL No Observable Adverse Effect Level EC50 Effective Concentration 50% NOEC No Observed Effect Concentration to Observed Effect Concentration EGEST EOSCA Generic Exposure Scenario Tool OSHA Occupational Safety & Health Administration	previous vers The informat The informat information a guidance for not to be con specific mate other materia	sions. ion in this SDS pertains only ion provided in this Safety D ind belief at the date of its pu- safe handling, use, processi- isidered a warranty or quality erial designated and may not als or in any process, unless Key or legend to abbreviation American Conference of Government Industrial Hyg Australian Inventory of Indu- Chemicals Canada, Domestic Substar List Canada, Non-Domestic Substances List	to the product as shi ata Sheet is correct to ublication. The informa- ing, storage, transport y specification. The in be valid for such mat specified in the text. <u>Is and acronyms used</u> <u>LD50</u> ienists ustrial LOAEL nces NFPA NIOSH	opped. to the best of our knowledge, ation given is designed only as a tation, disposal and release and is formation relates only to the terial used in combination with any d in the safety data sheet Lethal Dose 50% Lowest Observed Adverse Effect Level National Fire Protection Agency National Institute for Occupationa Safety & Health	
EC50 Effective Concentration 50% NOEC No Observed Effect Concentrat EGEST EOSCA Generic Exposure Scenario Tool OSHA Occupational Safety & Health Administration	previous vers The informat The informat information a guidance for not to be con specific mate other materia	sions. ion in this SDS pertains only ion provided in this Safety D ind belief at the date of its pu- safe handling, use, processi- isidered a warranty or quality erial designated and may not als or in any process, unless Key or legend to abbreviation American Conference of Government Industrial Hyg Australian Inventory of Indu- Chemicals Canada, Domestic Substar List Canada, Non-Domestic Substances List Central Nervous System	to the product as shi ata Sheet is correct to ublication. The informa- ing, storage, transport y specification. The in be valid for such mat specified in the text. <u>Is and acronyms used</u> <u>LD50</u> ienists ustrial LOAEL nees NFPA NIOSH NTP	oped. the best of our knowledge, ation given is designed only as a tation, disposal and release and is formation relates only to the terial used in combination with any d in the safety data sheet Lethal Dose 50% Lowest Observed Adverse Effect Level National Fire Protection Agency National Institute for Occupationa Safety & Health National Toxicology Program	
EGEST EOSCA Generic Exposure OSHA Occupational Safety & Health Scenario Tool Administration	previous vers The informat The informat information a guidance for not to be con specific mate other materia	sions. ion in this SDS pertains only ion provided in this Safety D ind belief at the date of its pu- safe handling, use, processi- isidered a warranty or quality erial designated and may not als or in any process, unless Key or legend to abbreviation American Conference of Government Industrial Hyg Australian Inventory of Indu- Chemicals Canada, Domestic Substar- List Canada, Non-Domestic Substances List Chemical Abstract Service	to the product as shi ata Sheet is correct to ublication. The informa- ing, storage, transport y specification. The in be valid for such mat specified in the text. <u>Is and acronyms used</u> <u>LD50</u> ienists ustrial LOAEL nees NFPA NIOSH NTP NZIOC	oped. the best of our knowledge, ation given is designed only as a tation, disposal and release and is formation relates only to the terial used in combination with any d in the safety data sheet Lethal Dose 50% Lowest Observed Adverse Effect Level National Fire Protection Agency National Institute for Occupationa Safety & Health National Toxicology Program New Zealand Inventory of Chemicals No Observable Adverse Effect	
	previous vers The informat The informat information a guidance for not to be con specific mate other materia ACGIH AIIC DSL NDSL CNS CAS EC50	sions. ion in this SDS pertains only ion provided in this Safety D ind belief at the date of its pu- safe handling, use, processi- isidered a warranty or quality- erial designated and may not als or in any process, unless Key or legend to abbreviation American Conference of Government Industrial Hyg Australian Inventory of Indu- Chemicals Canada, Domestic Substar- List Canada, Non-Domestic Substances List Chemical Abstract Service Effective Concentration	y to the product as shi ata Sheet is correct to ublication. The informa- ing, storage, transport y specification. The in be valid for such mat specified in the text. <u>Is and acronyms used</u> <u>LD50</u> ienists ustrial LOAEL nees NFPA <u>NIOSH</u> <u>NTP</u> NZIOC NOAEL	oped. the best of our knowledge, ation given is designed only as a tation, disposal and release and is formation relates only to the terial used in combination with any d in the safety data sheet Lethal Dose 50% Lowest Observed Adverse Effect Level National Fire Protection Agency National Institute for Occupationa Safety & Health National Toxicology Program New Zealand Inventory of Chemicals No Observable Adverse Effect Level	
	previous vers The informat The informat information a guidance for not to be con specific mate other materia ACGIH AIIC DSL NDSL CNS CAS EC50 EC50	sions. ion in this SDS pertains only ion provided in this Safety D ind belief at the date of its pu- safe handling, use, processi- isidered a warranty or quality- erial designated and may not als or in any process, unless Key or legend to abbreviation American Conference of Government Industrial Hyg Australian Inventory of Indu- Chemicals Canada, Domestic Substar- List Canada, Non-Domestic Substances List Central Nervous System Chemical Abstract Service Effective Concentration Effective Concentration 50° EOSCA Generic Exposure	r to the product as shi ata Sheet is correct to ablication. The informa- ing, storage, transport y specification. The in be valid for such mat specified in the text. <u>Is and acronyms used</u> <u>LD50</u> <u>ienists</u> <u>LD50</u> <u>ienists</u> <u>LD50</u> <u>ienists</u> <u>LD50</u> <u>ienists</u> <u>LD50</u> <u>ienists</u> <u>NIOSH</u> <u>NTP</u> <u>NZIOC</u> <u>NOAEL</u> % NOEC	oped. the best of our knowledge, ation given is designed only as a fation, disposal and release and is formation relates only to the terial used in combination with any d in the safety data sheet Lethal Dose 50% Lowest Observed Adverse Effect Level National Institute for Occupationa Safety & Health National Institute for Occupationa Safety & Health National Toxicology Program New Zealand Inventory of Chemicals No Observable Adverse Effect Level No Observed Effect Concentratio Occupational Safety & Health	
Chemicals Association	previous vers The informat The informat information a guidance for not to be con specific mate other materia ACGIH AIIC DSL NDSL CNS CAS EC50 EGEST	sions. ion in this SDS pertains only ion provided in this Safety D and belief at the date of its pu- safe handling, use, processi- isidered a warranty or quality- erial designated and may not als or in any process, unless Key or legend to abbreviation American Conference of Government Industrial Hyg Australian Inventory of Indu- Chemicals Canada, Domestic Substar- List Canada, Non-Domestic Substances List Central Nervous System Chemical Abstract Service Effective Concentration Effective Concentration 50° EOSCA Generic Exposure Scenario Tool European Oilfield Specialty	r to the product as shi ata Sheet is correct to ablication. The informa- ing, storage, transport y specification. The in be valid for such mat specified in the text. <u>Is and acronyms used</u> <u>LD50</u> ienists <u>LD50</u> ienists Justrial LOAEL <u>COSHA</u> NOAEL <u>% NOEC</u> OSHA	oped. o the best of our knowledge, ation given is designed only as a tation, disposal and release and is formation relates only to the terial used in combination with any d in the safety data sheet Lethal Dose 50% Lowest Observed Adverse Effect Level National Institute for Occupationa Safety & Health National Institute for Occupationa Safety & Health National Toxicology Program New Zealand Inventory of Chemicals No Observable Adverse Effect Level No Observed Effect Concentration Occupational Safety & Health	

SAFETY DATA SHEET

Version 1.10

Revision Date 2025-05-14

			-
EINECS	European Inventory of Existing	PICCS	Philippines Inventory of
	Chemical Substances		Commercial Chemical Substances
MAK	Germany Maximum Concentration	PRNT	Presumed Not Toxic
	Values		
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	TLV	Threshold Limit Value
	on Cancer		
IECSC	Inventory of Existing Chemical	TWA	Time Weighted Average
	Substances in China		
ENCS	Japan, Inventory of Existing and	TSCA	Toxic Substance Control Act
	New Chemical Substances		
KECI	Korea, Existing Chemical	UVCB	Unknown or Variable Composition,
	Inventory		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

SDS Number:100000068283