

Version 10.5	Revision Date: 10/10/2020		DS Number: 336443-00045	Date of last issue: 02/27/2020 Date of first issue: 02/27/2017				
SECTIO	N 1. IDENTIFICATION							
Proc	duct name	:	Freon™ 410A (R	Freon™ 410A (R-410A) Refrigerant				
SDS	S-Identcode	:	130000050990					
Mar	ufacturer or supplier's	deta	ails					
Con	Company name of supplier		The Chemours Company FC, LLC					
Add	Address		1007 Market Street Wilmington, DE 19801 United States of America (USA)					
Tele	phone	:	1-844-773-CHEM (outside the U.S. 1-302-773-1000)					
Eme	Emergency telephone		Medical emergency: 1-866-595-1473 (outside the U.S. 1-302 773-2000) ; Transport emergency: +1-800-424-9300 (outsic the U.S. +1-703-527-3887)					
Rec	Recommended use of the o		nical and restriction	ons on use				
Rec	ommended use	:	Refrigerant					
Res	trictions on use	:	For professional	users only.				

SECTION 2. HAZARDS IDENTIFICATION

GHS classification in accordance with the OSHA Hazard Communication Standard (29 CFR 1910.1200)		
Gases under pressure	:	Liquefied gas
Simple Asphyxiant		
GHS label elements		
Hazard pictograms	:	\sim
Signal Word	:	Warning
Hazard Statements	:	H280 Contains gas under pressure; may explode if heated. May displace oxygen and cause rapid suffocation.
Precautionary Statements	:	Storage: P410 + P403 Protect from sunlight. Store in a well-ventilated place.



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Other hazards

Vapors are heavier than air and can cause suffocation by reducing oxygen available for breathing. Misuse or intentional inhalation abuse may cause death without warning symptoms, due to cardiac effects.

Rapid evaporation of the product may cause frostbite.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture : Mixture

Components

Chemical name	CAS-No.	Concentration (% w/w)
Pentafluoroethane#	354-33-6	50
Difluoromethane#	75-10-5	50

Voluntarily-disclosed non-hazardous substance

SECTION 4. FIRST AID MEASURES

General advice	:	In the case of accident or if you feel unwell, seek medical ad- vice immediately. When symptoms persist or in all cases of doubt seek medical advice.
If inhaled	:	If inhaled, remove to fresh air. Get medical attention if symptoms occur.
In case of skin contact	:	Thaw frosted parts with lukewarm water. Do not rub affected area. Get medical attention immediately.
In case of eye contact	:	Get medical attention immediately.
If swallowed	:	Ingestion is not considered a potential route of exposure.
Most important symptoms and effects, both acute and delayed	:	May cause cardiac arrhythmia. Other symptoms potentially related to misuse or inhalation abuse are Cardiac sensitization Anaesthetic effects Light-headedness Dizziness confusion Lack of coordination Drowsiness Unconsciousness Contact with liquid or refrigerated gas can cause cold burns and frostbite.
Protection of first-aiders	:	No special precautions are necessary for first aid responders.
Notes to physician	:	Because of possible disturbances of cardiac rhythm, ca- techolamine drugs, such as epinephrine, that may be used in situations of emergency life support should be used with spe-



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			cial caution.	
SECTION	5. FIRE-FIGHTING ME	ASL	JRES	
Suita	ble extinguishing media	:	Not applicable Will not burn	
Unsu medi	iitable extinguishing a	:	Not applicable Will not burn	
Spec fighti	ific hazards during fire ng	:		pustion products may be a hazard to health. rises there is danger of the vessels bursting apor pressure.
Haza ucts	Hazardous combustion prod- ucts		Fluorine compour Carbon oxides Hydrogen fluoride carbonyl fluoride	
Spec ods	ific extinguishing meth-	:	cumstances and f Fight fire remotely Use water spray t	measures that are appropriate to local cir- he surrounding environment. due to the risk of explosion. o cool unopened containers. ged containers from fire area if it is safe to do
	cial protective equipment re-fighters	:	necessary.	ed breathing apparatus for firefighting if tective equipment.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protec- : tive equipment and emer- gency procedures	Evacuate personnel to safe areas. Avoid skin contact with leaking liquid (danger of frostbite). Ventilate the area. Follow safe handling advice (see section 7) and personal pro- tective equipment recommendations (see section 8).
Environmental precautions :	Avoid release to the environment. Prevent further leakage or spillage if safe to do so. Retain and dispose of contaminated wash water.
Methods and materials for : containment and cleaning up	Ventilate the area. Local or national regulations may apply to releases and dispo- sal of this material, as well as those materials and items em- ployed in the cleanup of releases. You will need to determine which regulations are applicable. Sections 13 and 15 of this SDS provide information regarding certain local or national requirements.

SECTION 7. HANDLING AND STORAGE

Technical measures

: Use equipment rated for cylinder pressure. Use a backflow



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			preventative devi when empty.	ce in piping. Close valve after each use and
Local/T	otal ventilation	:	Use only with ade	equate ventilation.
Advice	on safe handling	:	practice, based o sessment Wear cold insulat Valve protection o remain in place u piped to use poin Use a check valv zardous back flow Prevent backflow Use a pressure re to lower pressure Close valve after or force fit connee Prevent the intrus Never attempt to Do not drag, slide Use a suitable ha Keep away from Take precautiona	ance with good industrial hygiene and safety n the results of the workplace exposure as- ing gloves/ face shield/ eye protection. caps and valve outlet threaded plugs must nless container is secured with valve outlet t. e or trap in the discharge line to prevent ha- v into the cylinder. into the gas tank. educing regulator when connecting cylinder (<3000 psig) piping or systems. each use and when empty. Do NOT change ctions. sion of water into the gas tank. lift cylinder by its cap.
Conditi	ons for safe storage	:	vent falling or bei Separate full com Do not store near Avoid area where Keep in properly Keep in a cool, w Keep away from	tainers from empty containers. combustible materials. e salt or other corrosive materials are present. labeled containers. ell-ventilated place.
Materia	als to avoid	:	Self-reactive subs Organic peroxide Oxidizing agents Flammable liquid Flammable solids Pyrophoric liquids Pyrophoric solids Self-heating subs Substances and in flammable gases Explosives Acutely toxic subs	s s tances and mixtures mixtures which in contact with water emit
Recom	mended storage tem-	:	< 126 °F / < 52 °C	2



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perat	ure		
Storage period		: > 10 y	
	er information on stor- tability	: The product ha	as an indefinite shelf life when stored properly.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Ingredients with workplace control parameters

Components	CAS-No.	Value type (Form of exposure)	Control parame- ters / Permissible concentration	Basis
Pentafluoroethane	354-33-6	TWA	1,000 ppm	US WEEL
Difluoromethane	75-10-5	TWA	1,000 ppm	US WEEL

Engineering measures

: Ensure adequate ventilation, especially in confined areas. Minimize workplace exposure concentrations.

Personal protective equipment

Respiratory protection	:	General and local exhaust ventilation is recommended to maintain vapor exposures below recommended limits. Where concentrations are above recommended limits or are unknown, appropriate respiratory protection should be worn. Follow OSHA respirator regulations (29 CFR 1910.134) and use NIOSH/MSHA approved respirators. Protection provided by air purifying respirators against exposure to any hazar- dous chemical is limited. Use a positive pressure air supplied respirator if there is any potential for uncontrolled release, exposure levels are unknown, or any other circumstance where air purifying respirators may not provide adequate protection.
Hand protection Material	:	Low temperature resistant gloves
Remarks	:	Choose gloves to protect hands against chemicals depending on the concentration specific to place of work. For special applications, we recommend clarifying the resistance to che- micals of the aforementioned protective gloves with the glove manufacturer. Wash hands before breaks and at the end of workday. Breakthrough time is not determined for the pro- duct. Change gloves often!
Eye protection	:	Wear the following personal protective equipment: Chemical resistant goggles must be worn. Face-shield
Skin and body protection	:	Skin should be washed after contact.
Protective measures	:	Wear cold insulating gloves/ face shield/ eye protection.



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Hygie	Hygiene measures		 If exposure to chemical is likely during typical use, provey eye flushing systems and safety showers close to the wing place. When using do not eat, drink or smoke. Wash contaminated clothing before re-use. 		
SECTION	9. PHYSICAL AND CH	EMIC		6	
Appea	arance	:	Liquefied gas		
Color		:	colorless		
Odor		:	slight, ether-like		
Odor	Threshold	:	No data available	9	
pН		:	No data available	9	
Meltir	ng point/freezing point	:	No data available	2	
Initial range	boiling point and boiling	:	-60.9 °F / -51.6 ° (1,013 hPa)	c	
Flash	point	:	Not applicable		
Evapo	oration rate	:	> 1 (CCL4=1.0)		
Flamr	mability (solid, gas)	:	Will not burn		
	r explosion limit / Upper nability limit	:	Upper flammabili Method: ASTM E None.		
	r explosion limit / Lower nability limit	:	Lower flammabili Method: ASTM E None.		
Vapo	r pressure	:	16,530 hPa (77 °	F / 25 °C)	
			30,520 hPa (122	°F / 50 °C)	
Relati	ive vapor density	:	2.5		
Relati	ive density	:	1.06 (77 °F / 25 °	°C)	
Densi	ity	:	1.062 g/cm³ (77 (as liquid)	°F / 25 °C)	

SAFETY DATA SHEET

products



Freon[™] 410A (R-410A) Refrigerant

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	Solubility(ies) Water solubility		No data available	e		
	Partition coefficient: n- octanol/water		Not applicable			
Auto	ignition temperature	:	No data available	9		
Deco	omposition temperature	:	No data available			
	Viscosity Viscosity, kinematic		Not applicable			
Expl	Explosive properties		Not explosive			
Oxid	Oxidizing properties		The substance o	r mixture is not classified as oxidizing.		
Parti	Particle size		Not applicable			
SECTION	SECTION 10. STABILITY AND R		ΤΙVITY			
Read	ctivity	:	Not classified as	a reactivity hazard.		
Cher	nical stability			directed. Follow precautionary advice and le materials and conditions.		

Possibility of hazardous reac-	:	Can react with strong oxidizing agents.
tions		

Conditions to avoid :	This substance is not flammable in air at temperatures up to 100 °C (212 °F) at atmospheric pressure. However, mixtures of this substance with high concentrations of air at elevated pressure and/or temperature can become combustible in the presence of an ignition source. This substance can also become combustible in an oxygen enriched environment (oxygen concentrations greater than that in air). Whether a mixture containing this substance and air, or this substance in an oxygen enriched atmosphere become combustible depends on the inter-relationship of 1) the temperature 2) the pressure, and 3) the proportion of oxygen in the mixture. In general, this substance should not be allowed to exist with air above atmospheric pressure or at high temperatures; or in an oxygen enriched environment. For example this substance should NOT be mixed with air under pressure for leak testing or other purposes. Heat, flames and sparks.
Incompatible materials :	Oxidizing agents
Hazardous decomposition :	No bazardous decomposition products are known





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ECTION	11. TOXICOLOGICA	L INFORMATION	
Inform	nation on likely rout	es of exposure	
Inhala	-		
	ontact		
	e toxicity assified based on av	ailable information.	
<u>Com</u>	oonents:		
Penta	afluoroethane:		
Acute	inhalation toxicity	: LC50 (Rat): > 8 Exposure time: Test atmospher Method: OECD	4 h
			dverse effect concentration (Dog): 75000 ppn iac sensitization
			sation threshold limit (Dog): 368.159 mg/m ³ iac sensitization
Difluc	promethane:		
Acute	oral toxicity	: Assessment: The icity	ne substance or mixture has no acute oral to
Acute	inhalation toxicity	: LC50 (Rat): > 5	
		Exposure time: Test atmosphe	e: gas
		Method: OECD	Test Guideline 403
		Test atmosphered	dverse effect concentration (Dog): 350000 pp re: gas iac sensitization
		350000 ppm Test atmosphe	ed adverse effect concentration (Dog): > re: gas iac sensitization
		Test atmosphered	sation threshold limit (Dog): > 735,000 mg/m³ re: gas iac sensitization
Acute	dermal toxicity	: Assessment: The toxicity	ne substance or mixture has no acute dermal

Skin corrosion/irritation

Not classified based on available information.



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Comp	oonents:			
Difluc Resul	promethane: t	:	No skin irritation	
	us eye damage/eye assified based on ava			
Comp	oonents:			
Difluc Resul	promethane: t	÷	No eye irritation	
Respi	ratory or skin sensi	itizatio	n	
-	sensitization assified based on ava	ailable	information.	
-	ratory sensitization assified based on ava		information.	
Comp	oonents:			
Difluc	promethane:			
	s of exposure t	:	Skin contact negative	
Route Resul Germ Not cl	t cell mutagenicity assified based on ava	: : ailable	negative	
Route Resul Germ Not cl	t cell mutagenicity	: : ailable	negative	
Route Resul Germ Not cl <u>Comp</u> Penta	t cell mutagenicity assified based on ava	: : ailable :	negative information. Test Type: Bacte	rial reverse mutation assay (AMES) rest Guideline 471
Route Resul Germ Not cl <u>Comp</u> Penta	t cell mutagenicity assified based on ava <u>ponents:</u> fluoroethane:	: ailable :	negative information. Test Type: Bacte Method: OECD T Result: negative Test Type: In vitro Result: negative	
Route Resul Germ Not cl <u>Comp</u> Penta	t cell mutagenicity assified based on ava <u>ponents:</u> fluoroethane:	: ailable :	negative information. Test Type: Bacte Method: OECD T Result: negative Test Type: In vitro Result: negative Remarks: Based Test Type: Chron	est Guideline 471
Route Resul Or cl Comp Penta Genot	t cell mutagenicity assified based on ava <u>ponents:</u> fluoroethane:	: ailable :	negative information. Test Type: Bacte Method: OECD T Result: negative Test Type: In vitro Result: negative Remarks: Based Test Type: Chron Method: OECD T Result: negative Test Type: Chron Method: OECD T Result: negative Test Type: Mamr cytogenetic assay Species: Mouse Application Route	est Guideline 471 o mammalian cell gene mutation test on data from similar materials nosome aberration test in vitro est Guideline 473 nalian erythrocyte micronucleus test (in viv
Route Resul Or Cl Comp Penta Genot	t cell mutagenicity assified based on ava <u>ponents:</u> f luoroethane: toxicity in vitro	: ailable :	negative information. Test Type: Bacte Method: OECD T Result: negative Test Type: In vitre Result: negative Remarks: Based Test Type: Chron Method: OECD T Result: negative Test Type: Mamr cytogenetic assay Species: Mouse Application Route Method: OECD T	est Guideline 471 o mammalian cell gene mutation test on data from similar materials nosome aberration test in vitro est Guideline 473 malian erythrocyte micronucleus test (in viv y)



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		Method: OECD Test Guideline 471 Result: negative Test Type: Chromosome aberration test in vitro		
		Method: OECD Test Guideline 473 Result: negative		
Geno	toxicity in vivo	 Test Type: Mammalian erythrocyte micronucleus test (in vivo cytogenetic assay) Species: Mouse Application Route: inhalation (gas) Method: OECD Test Guideline 474 Result: negative 		
	i cell mutagenicity - ssment	: Weight of evidence does not support classification as a germ cell mutagen.		
Carci	inogenicity			
	lassified based on ava No ingredie	ilable information. Int of this product present at levels greater than or equal to 0.1% is s probable, possible or confirmed human carcinogen by IARC.		
OSH	OSHA No component of this product present at levels greater than or equal to 0.1% on OSHA's list of regulated carcinogens.			
NTP		nt of this product present at levels greater than or equal to 0.1% is a known or anticipated carcinogen by NTP.		
-	oductive toxicity lassified based on ava	ilable information.		
Not c	-	ilable information.		
Not c <u>Com</u>	lassified based on ava	ilable information.		
Not c <u>Com</u> Penta	lassified based on ava ponents:	 ilable information. Test Type: One-generation reproduction toxicity study Species: Rat Application Route: inhalation (vapor) Result: negative Remarks: Based on data from similar materials 		
Not c <u>Com</u> Penta Effec	lassified based on ava ponents: afluoroethane:	 Test Type: One-generation reproduction toxicity study Species: Rat Application Route: inhalation (vapor) Result: negative Remarks: Based on data from similar materials 		
Not c <u>Com</u> Penta Effec	lassified based on ava ponents: afluoroethane: ts on fertility	 Test Type: One-generation reproduction toxicity study Species: Rat Application Route: inhalation (vapor) Result: negative Remarks: Based on data from similar materials Test Type: Embryo-fetal development Species: Rat Application Route: inhalation (gas) Method: OECD Test Guideline 414 		
Not c <u>Com</u> Penta Effec Diflue	lassified based on ava ponents: afluoroethane: ts on fertility ts on fetal developmer	 Test Type: One-generation reproduction toxicity study Species: Rat Application Route: inhalation (vapor) Result: negative Remarks: Based on data from similar materials Test Type: Embryo-fetal development Species: Rat Application Route: inhalation (gas) Method: OECD Test Guideline 414 		



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	reproduction/developme Species: Rat Application Route: inhala Method: OECD Test Gui Result: negative	
Reproductive toxicity - As- sessment	: Weight of evidence does ductive toxicity	s not support classification for repro-
STOT-single exposure Not classified based on avai	able information.	
<u>Components:</u>		
Difluoromethane: Routes of exposure Assessment	 inhalation (gas) No significant health effections of 20000 ppmV/4h 	ects observed in animals at concentr or less
STOT-repeated exposure Not classified based on avai	able information.	
Components:		
Difluoromethane: Routes of exposure Assessment	 inhalation (gas) No significant health effections of 250 ppmV/6h/d of 	ects observed in animals at concentr or less.
Repeated dose toxicity		
Components:		
Pentafluoroethane:		
Species NOAEL Application Route Exposure time Method	: Rat : >= 50000 ppm : inhalation (gas) : 13 Weeks : OECD Test Guideline 41	13
Difluoromethane:		
Species NOAEL LOAEL Application Route Exposure time	 Rat, male and female 49100 ppm > 49100 ppm inhalation (gas) 13 Weeks 	
1		



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Metho	od	:	OECD Test Guide	eline 413
-	ation toxicity assified based on availa	ble	information.	
<u>Comp</u>	oonents:			
No as	piration toxicity classifica			
ECTION	12. ECOLOGICAL INFO	ORN	IATION	
Ecoto	oxicity			
<u>Comp</u>	oonents:			
Penta	fluoroethane:			
Toxici	ty to fish	:	Exposure time: 9	chus mykiss (rainbow trout)): > 100 mg/l 6 h on data from similar materials
	ty to daphnia and other ic invertebrates	:	Exposure time: 4	nagna (Water flea)): > 100 mg/l 3 h on data from similar materials
Toxici plants	ty to algae/aquatic	:	mg/l Exposure time: 72 Method: OECD T	
			mg/l Exposure time: 72 Method: OECD T	
Difluc	promethane:			
Toxici	ty to fish	:	LC50 (Fish): 1,50 Exposure time: 90 Method: ECOSAI ships)	
	ty to daphnia and other ic invertebrates	:	EC50 (Daphnia): Exposure time: 4 Method: ECOSAI ships)	
Toxici plants	ity to algae/aquatic	:	EC50 (green alga Exposure time: 9 Method: ECOSAI ships)	



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Persi	stence and degrada	oility		
<u>Com</u>	ponents:			
Penta	afluoroethane:			
Biode	egradability	B E	iodegradation xposure time:	
Diflu	oromethane:			
Biode	egradability			dily biodegradable. Test Guideline 301D
Bioa	ccumulative potentia	I		
Com	ponents:			
Penta	afluoroethane:			
	ion coefficient: n- ol/water		ow: 1.48 lethod: OECD	Test Guideline 107
Diflu	oromethane:			
	ion coefficient: n- ol/water	: lo	g Pow: 0.714	
Mobi	lity in soil			
No da	ata available			
Othe	r adverse effects			
No da	ata available			

Disposal methods Waste from residues	:	Dispose of in accordance with local regulations.
Contaminated packaging	:	Empty containers should be taken to an approved waste handling site for recycling or disposal. Empty pressure vessels should be returned to the supplier. If not otherwise specified: Dispose of as unused product.

SECTION 14. TRANSPORT INFORMATION

International Regulations

UNRTDG		
UN number	:	UN 3163
Proper shipping name	:	LIQUEFIED GAS, N.O.S. (Pentafluoroethane, Difluoromethane)
Class	:	2.2



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Packing group Labels		:	Not assigned by 1 2.2	regulation
UN/IE Prope Class Packi Label Packi aircra Packi	er shipping name ing group s ing instruction (cargo	:	UN 3163 Liquefied gas, n.c (Pentafluoroetha 2.2 Not assigned by n Non-flammable, n 200	ne, Difluoromethane) regulation
UN n Prope Class Packi Label EmS	ng group		UN 3163 LIQUEFIED GAS (Pentafluoroethar 2.2 Not assigned by r 2.2 F-C, S-V no	ne, Difluoromethane)

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable for product as supplied.

Domestic regulation

49 CFR UN/ID/NA number : Proper shipping name :	UN 3163 Liquefied gas, n.o.s. (Pentafluoroethane, Difluoromethane)
Class :	2.2
Packing group :	Not assigned by regulation
Labels :	NON-FLAMMABLE GAS
ERG Code :	126
Marine pollutant :	no

Special precautions for user

The transport classification(s) provided herein are for informational purposes only, and solely based upon the properties of the unpackaged material as it is described within this Safety Data Sheet. Transportation classifications may vary by mode of transportation, package sizes, and variations in regional or country regulations.

SECTION 15. REGULATORY INFORMATION

CERCLA Reportable Quantity

This material does not contain any components with a CERCLA RQ.

SARA 304 Extremely Hazardous Substances Reportable Quantity

This material does not contain any components with a section 304 EHS RQ.

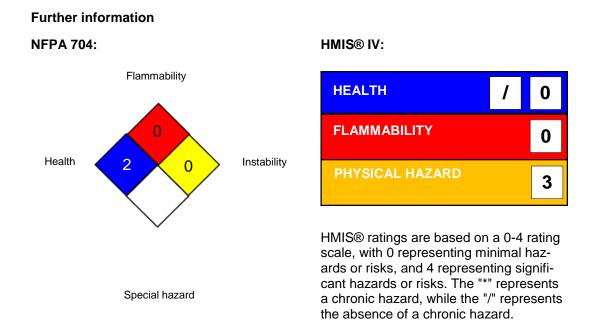
SARA 302 Extremely Hazardous Substances Threshold Planning Quantity

This material does not contain any components with a section 302 EHS TPQ.



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SARA	311/312 Hazards	:	Gases under pres Simple Asphyxia		
SARA	. 313	:	known CAS num	bers th	ontain any chemical components with at exceed the threshold (De Minimis) ned by SARA Title III, Section 313.
US State Regulations					
Pennsylvania Right To Know					
	Pentafluoroethane				354-33-6
	Difluoromethane				75-10-5
California List of Hazardous Substances					
	Difluoromethane				75-10-5
Intern	ational Regulations				
Montre	eal Protocol			:	Pentafluoroethane Difluoromethane

SECTION 16. OTHER INFORMATION



Freon[™] and any associated logos are trademarks or copyrights of The Chemours Company FC, LLC.

Chemours [™] and the Chemours Logo are trademarks of The Chemours Company. Before use read Chemours safety information.

For further information contact the local Chemours office or nominated distributors.

Full text of other abbreviations

US WEEL : USA. Workplace Environmental Exposure Levels (WEEL)



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US WEEL / TWA : 8-hr TWA

AIIC - Australian Inventory of Industrial Chemicals; ASTM - American Society for the Testing of Materials; bw - Body weight; CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DOT - Department of Transportation; DSL - Domestic Substances List (Canada); ECx - Concentration associated with x% response; EHS - Extremely Hazardous Substance; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response; ERG - Emergency Response Guide; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; HMIS - Hazardous Materials Identification System; IARC -International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization; KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; MSHA - Mine Safety and Health Administration; n.o.s. - Not Otherwise Specified; NFPA - National Fire Protection Association; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NTP - National Toxicology Program; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; RCRA - Resource Conservation and Recovery Act; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; RQ - Reportable Quantity; SADT - Self-Accelerating Decomposition Temperature; SARA - Superfund Amendments and Reauthorization Act; SDS - Safety Data Sheet; TCSI - Taiwan Chemical Substance Inventory; TSCA - Toxic Substances Control Act (United States); UN - United Nations; UNRTDG -United Nations Recommendations on the Transport of Dangerous Goods; vPvB - Very Persistent and Very Bioaccumulative

Sources of key data used to compile the Material Safety Data Sheet	:	Internal technical data, data from raw material SDSs, OECD eChem Portal search results and European Chemicals Agen- cy, http://echa.europa.eu/

Revision Date : 10/10/2020

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