

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations Date of issue: 09/10/2016 Revision date: 09/10/2016 Version: 1.1

SECTION 1: Identifie	cation	
1.1. Identification		
Product form		: Mixture
Name		: Standard for Semi-quantitative Method - 7 components; K 1000mg/l ; Ag 100mg/l ; Al 100mg/l ; B 100mg/l ; Ba 100mg/l ; Na 100mg/l ; Si 50mg/l in HNO3 5%/ tr. HF Equivalent to Jobin Yvon Ref: JYICP-MIX7
Product code		: EQ0050
1.2. Relevant identi	fied uses of the subst	ance or mixture and uses advised against
Use of the substance/mixtu	ıre	: Certified reference material for laboratory use
1.3. Details of the se	upplier of the safety d	ata sheet
Spectracer UK Ltd. Second Floor, 27 Gloucester Place, London, W1U 8HU, United Kingdom.		
Tel: +44 (0) 207 193 9114 Fax:+44 (0) 203 432 4686 Email: <u>contact@spectrace</u> Web: <u>www.spectracer.com</u>		
1.4. Emergency tele	phone number	
Emergency number		: Tel: +44(0)1933445260 Option 1. Language: English only. For Chemical Emergencies Only Llewellyn (Safety Advisors) Europe Ltd
SECTION 2: Hazard	(s) identification	
	f the substance or mi	xture
GHS-US classification		
Corrosive to metals	H290	
Category 1	11200	
Skin corrosion/irritation	H314	
Category 1A Hazardous to the	H401	
aquatic environment -		
Acute Hazard Category		
	see section 16	
Full text of H statements :		
2.2. Label elements		
2.2. Label elements GHS-US labeling		: •
2.2. Label elements GHS-US labeling Hazard pictograms (GHS-I		: GHS05
2.2. Label elements GHS-US labeling Hazard pictograms (GHS-U Signal word (GHS-US)	JS)	: Danger
Full text of H statements : . 2.2. Label elements GHS-US labeling Hazard pictograms (GHS-I Signal word (GHS-US) Hazard statements (GHS-I	JS)	

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Precautionary statements (GHS-US)	: P234 - Keep only in original container
	P260 - Do not breathe dust/fume/gas/mist/vapors/spray
	P273 - Avoid release to the environment
	P280 - Wear protective gloves/protective clothing/eye protection/face protection
	P301+P330+P331 - If swallowed: rinse mouth. Do NOT induce vomiting
	P303+P361+P353 - If on skin (or hair): Take off immediately all contaminated clothing. Rinse
	skin with water/shower
	P304+P340 - IF INHALED: Remove person to fresh air and keep comfortable for breathing
	P305+P351+P338 - If in eyes: Rinse cautiously with water for several minutes. Remove contact
	lenses, if present and easy to do. Continue rinsing
	P310 - Immediately call a poison center/doctor/
	P363 - Wash contaminated clothing before reuse
	P390 - Absorb spillage to prevent material damage
	P405 - Store locked up
	P501 - Dispose of contents/container to

2.3. Other hazards

No additional information available

2.4. Unknown acute toxicity (GHS US)

Not applicable

SECTION 3: Composition/Information on ingredients

3.1. Substance

Not applicable

3.2. Mixture

Name	Product identifier	%	GHS-US classification
nitric acid	(CAS No) 7697-37-2	5 - 15	Ox. Liq. 3, H272 Met. Corr. 1, H290 Skin Corr. 1A, H314
hydrofluoric acid	(CAS No) 7664-39-3	0.1 - 1	Met. Corr. 1, H290 Acute Tox. 2 (Oral), H300 Acute Tox. 1 (Dermal), H310 Acute Tox. 2 (Inhalation), H330 Skin Corr. 1A, H314
boric acid	(CAS No) 10043-35-3	< 0.1	Repr. 1B, H360
ammonium hexafluorosilicate	(CAS No) 16919-19-0	< 0.1	Acute Tox. 3 (Oral), H301 Acute Tox. 3 (Dermal), H311 Acute Tox. 3 (Inhalation), H331
barium nitrate	(CAS No) 10022-31-8	< 0.1	Acute Tox. 4 (Oral), H302
silver nitrate	(CAS No) 7761-88-8	< 0.1	Ox. Sol. 2, H272 Acute Tox. 4 (Oral), H302 Skin Corr. 1B, H314 Aquatic Acute 1, H400 Aquatic Chronic 1, H410

Full text of hazard classes and H-statements : see section 16

SECTION 4: First aid measures		
4.1. Description of first aid measures		
First-aid measures general : Call a physician immediately.		
First-aid measures after inhalation	: Remove person to fresh air and keep comfortable for breathing.	
First-aid measures after skin contact	: Rinse skin with water/shower. Remove/Take off immediately all contaminated clothing. Call a physician immediately.	
First-aid measures after eye contact	: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Call a physician immediately.	
First-aid measures after ingestion	: Rinse mouth. Do not induce vomiting. Call a physician immediately.	
4.2. Most important symptoms and effect	s, both acute and delayed	
Symptoms/injuries after skin contact	: Burns.	
Symptoms/injuries after eye contact	: Serious damage to eyes.	
Symptoms/injuries after ingestion	: Burns.	

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4.3. Indication of any immediate medical attention and special treatment needed Treat symptomatically.				
SECTION 5: Firefighting measures				
5.1. Extinguishing media				
Suitable extinguishing media	:	Water spray. Dry powder. Foam. Carb	on dioxide.	
5.2. Special hazards aris	ing from the subs	ance or mixture		
Reactivity	:	The product is non-reactive under non	mal conditions of use, storage and transport.	
5.3. Advice for firefighter	rs			
Protection during firefighting	:	Do not attempt to take action without s apparatus. Complete protective clothin	suitable protective equipment. Self-contained breathing ng.	
SECTION 6: Accidental	release measu	res		
6.1. Personal precaution	s, protective equip	oment and emergency procedures		
6.1.1. For non-emergency	personnel			
Emergency procedures	:	Ventilate spillage area. Avoid contact v dust/fume/gas/mist/vapors/spray.	with skin and eyes. Do not breathe	
6.1.2. For emergency resp	onders			
Protective equipment	:	Do not attempt to take action without s refer to section 8: "Exposure controls/	suitable protective equipment. For further information personal protection".	
6.2. Environmental preca				
Avoid release to the environmer	nt.			
6.3. Methods and materia		• •		
Methods for cleaning up		Take up liquid spill into absorbent mat		
Other information		Dispose of materials or solid residues	at an authorized site.	
6.4. Reference to other s For further information refer to s				
SECTION 7: Handling an				
7.1. Precautions for safe	handling	Ensure good ventilation of the work at	ation Avoid contact with skin and succ. Do not broaths	
Precautions for safe handling	-	dust/fume/gas/mist/vapors/spray. Wea	ation. Avoid contact with skin and eyes. Do not breathe ar personal protective equipment.	
Hygiene measures	:	Wash contaminated clothing before re Always wash hands after handling the	use. Do not eat, drink or smoke when using this product. product.	
7.2. Conditions for safe s	storage, including	any incompatibilities		
Storage conditions	:	Store in corrosive resistant container v	with a resistant inner liner. Keep only in original container.	
Incompatible materials	:	Store locked up. Store in a well-ventila Metals.	ned place. Keep cool.	
SECTION 8: Exposure c 8.1. Control parameters	ontrois/persor			
nitric acid (7697-37-2) ACGIH	ACGIH TWA (ppr	n)	2 ppm	
ACGIH	ACGIH STEL (pp		4 ppm	
ACGIH	Remark (ACGIH)	····/	URT & eye irr; dental erosion	
OSHA	OSHA PEL (TWA) (ma/m ³)	5 mg/m ³	
OSHA	OSHA PEL (TWA	, , , ,	-	
		/ (PPIII)	2 ppm	
hydrofluoric acid (7664-39-3)		~)	0.50 mm	
ACGIH	ACGIH TWA (ppr	,	0.50 ppm	
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hydrofluoric acid (76	64-39-3)	
ACGIH	ACGIH Ceiling (ppm)	2 ppm
ACGIH	Remark (ACGIH)	URT, LRT, skin, & eye irr
OSHA	Remark (OSHA)	(2) See Table Z-2.
silver nitrate (7761-88	3-8)	
ACGIH	ACGIH TWA (mg/m³)	0.01 mg/m³ (Silver Soluble compounds, as Ag; USA; Time-weighted average exposure limit 8 h; TLV - Adopted Value)
Not applicable		
boric acid (10043-35-	3)	
ACGIH	ACGIH TWA (mg/m³)	2 mg/m ³ (Borate compounds, inorganic; USA; Time- weighted average exposure limit 8 h; TLV - Adopted Value; Inhalable fraction)
ACGIH	ACGIH STEL (mg/m ³)	6 mg/m ³ (Borate compounds, inorganic; USA; Short time value; TLV - Adopted Value; Inhalable fraction)
barium nitrate (10022	-31-8)	
ACGIH	ACGIH TWA (mg/m³)	0.5 mg/m³ (Barium, soluble compounds, as Ba; USA; Time-weighted average exposure limit 8 h; TLV - Adopted Value)
OSHA	OSHA PEL (TWA) (mg/m ³)	0.5 mg/m³
ammonium hexafluor	osilicate (16919-19-0)	
ACGIH	ACGIH TWA (mg/m³)	2.5 mg/m ³ (Fluorides, as F; USA; Time-weighted average exposure limit 8 h; TLV - Adopted Value)
Not applicable		

8.2. Exposure controls	
Appropriate engineering controls	: Ensure good ventilation of the work station.
Personal protective equipment	: Avoid all unnecessary exposure. Gloves. Safety glasses. Protective clothing.

Hand protection	: Protective gloves.
Eye protection	: Safety glasses.
Skin and body protection	: Wear suitable protective clothing.
Respiratory protection	: In case of insufficient ventilation, wear suitable respiratory equipment.
Environmental exposure controls	: Avoid release to the environment.

SECTION 9: Physical and chemical properties			
9.1. Information on basic physical and c	9.1. Information on basic physical and chemical properties		
Physical state	: Liquid		
Color	: Mixture contains one or more component(s) which have the following colour(s): colorless to yellow On exposure to light: red-brown Colorless Colourless-white Colourless grey On exposure to light: dark grey to black White Colourless or white Colourless to whit		
Odor	 There may be no odour warning properties, odour is subjective and inadequate to warn o overexposure. Mixture contains one or more component(s) which have the following odour(s): irritating/pungent odor asphyxiating odor Odorless 	f	
Odor threshold	: No data available		
pH	: No data available		
Melting point	: Not applicable		
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Freezing point	: No data available
Boiling point	: No data available
Flash point	: No data available
Relative evaporation rate (butyl acetate=1)	: No data available
Flammability (solid, gas)	: Not applicable.
Vapor pressure	: No data available
Relative vapor density at 20 °C	: No data available
Relative density	: 1.06
Solubility	: Miscible with water.
Log Pow	: No data available
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
Explosion limits	: No data available
Explosive properties	: No data available
Oxidizing properties	: No data available

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity				
10.1.	Reactivity			
The pro	The product is non-reactive under normal conditions of use, storage and transport.			
10.2.	Chemical stability			
Stable ι	Stable under normal conditions.			
10.3.	Possibility of hazardous reactions			
No dang	gerous reactions known under normal conditions of use.			
10.4.	Conditions to avoid			
None u	nder recommended storage and handling conditions (see section 7).			
10.5.	Incompatible materials			
metals.	metals.			
10.6.	10.6. Hazardous decomposition products			
Under normal conditions of storage and use, hazardous decomposition products should not be produced.				
SECTION 11: Toxicological information				

11.1. Information on toxicological effects

Acute toxicity

: Not classified

hydrofluoric acid (7664-39-3)		
ATE US (oral)	5.000 mg/kg body weight	
ATE US (dermal)	5.000 mg/kg body weight	
ATE US (gases)	100.000 ppmV/4h	
ATE US (vapors)	0.500 mg/l/4h	
ATE US (dust, mist)	0.050 mg/l/4h	
silver nitrate (7761-88-8)		
LD50 oral rat	1173 mg/kg (Rat)	
ATE US (oral)	1173.000 mg/kg body weight	

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boric acid (10043-35-3)	
LD50 oral rat	2660 mg/kg (Rat; OECD 401: Acute Oral Toxicity; Literature study; >2600 mg/kg bodyweight;
LDE0 downol rokkit	Rat; Experimental value)
LD50 dermal rabbit	 > 2000 mg/kg Rabbit; Experimental value; FIFRA (40 CFR) 2660.000 mg/kg body weight
ATE US (oral)	
barium nitrate (10022-31-8)	
LD50 oral rat	355 mg/kg (Rat)
ATE US (oral)	355.000 mg/kg body weight
ammonium hexafluorosilicate (16919-19-0)	
LD50 oral rat	100 mg/kg (Rat)
ATE US (oral)	100.000 mg/kg body weight
ATE US (dermal)	300.000 mg/kg body weight
ATE US (gases)	700.000 ppmV/4h
ATE US (vapors)	3.000 mg/l/4h
ATE US (dust, mist)	0.500 mg/l/4h
Skin corrosion/irritation	: Causes severe skin burns and eye damage.
Serious eye damage/irritation	: Not classified
Respiratory or skin sensitization	: Not classified
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified
Poproductivo toxicity	: Not classified
Reproductive toxicity	
Specific target organ toxicity (single exposure)	: Not classified
Specific target organ toxicity (repeated exposure)	: Not classified
Aspiration hazard	: Not classified
Symptoms/injuries after skin contact	: Burns.
Symptoms/injuries after eye contact	: Serious damage to eyes.
Symptoms/injuries after ingestion	: Burns.
SECTION 12: Ecological information	
12.1. Toxicity	
Ecology - general	: Toxic to aquatic life.
nitric acid (7697-37-2)	
EC50 Daphnia 1	180 mg/l (EC50; 48 h)
LC50 fish 2	72 ppm (LC50; 96 h)
Threshold limit algae 1	> 19 mg/l (EC0)
hydrofluoric acid (7664-39-3)	
LC50 fish 1	107.5 mg/l (LC50; 96 h)
EC50 Daphnia 1	270 mg/l (EC50; 48 h)
Threshold limit algae 1	95 mg/l (EC0; 96 h)
silver nitrate (7761-88-8)	0.0006 mg// (ECE0: 48 b)
EC50 Daphnia 1	0.0006 mg/l (EC50; 48 h)
LC50 fish 2	0.006 mg/l (LC50; 96 h; Salmo gairdneri)
barium nitrate (10022-31-8)	
LC50 fish 1	> 1000 mg/l (LC50; 96 h)

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ammonium hexafluorosilicate (16919-19-0)	
LC50 fish 1	10 - 100 mg/l (LC50; 96 h)
EC50 Daphnia 1	10 - 100 mg/l (EC50; 48 h)
12.2. Persistence and degradability	
nitric acid (7697-37-2)	
Persistence and degradability	Biodegradability: Not applicable.
Biochemical oxygen demand (BOD)	Not applicable
Chemical oxygen demand (COD)	Not applicable
ThOD	Not applicable
hydrofluoric acid (7664-39-3)	
Persistence and degradability	Biodegradability: Not applicable.
Biochemical oxygen demand (BOD)	Not applicable
Chemical oxygen demand (COD)	Not applicable
ThOD	Not applicable
silver nitrate (7761-88-8)	
Persistence and degradability	Biodegradability: Not applicable. May cause long-term adverse effects in the environment.
Biochemical oxygen demand (BOD)	Not applicable
Chemical oxygen demand (COD)	Not applicable
ThOD	Not applicable
boric acid (10043-35-3)	
Persistence and degradability	Biodegradability: Not applicable. Biodegradability in soil: Not applicable. No (test)data available on mobility of the substance.
Biochemical oxygen demand (BOD)	Not applicable
Chemical oxygen demand (COD)	Not applicable
ThOD	Not applicable
barium nitrate (10022-31-8)	
Persistence and degradability	Biodegradability: Not applicable.
Biochemical oxygen demand (BOD)	Not applicable
Chemical oxygen demand (COD)	Not applicable
ThOD	Not applicable

12.3. Bioaccumulative potential

nitric acid (7697-37-2)	
BCF fish 1	<= 1 (BCF)
Log Pow	-2.3 (OECD 107: Partition Coefficient (n-octanol/water): Shake Flask Method)
Bioaccumulative potential	Bioaccumulation: Not applicable.
hydrofluoric acid (7664-39-3)	
Log Pow	-1.4 (Experimental value)
Bioaccumulative potential	Bioaccumulation: Not applicable.
silver nitrate (7761-88-8)	
BCF fish 1	11 - 19 (BCF)
BCF fish 2	15 - 150 (BCF)
Log Pow	0.19 (Estimated value)
Bioaccumulative potential	Low bioaccumulation potential (BCF < 500). Not established.

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boric acid (10043-35-3)	
BCF fish 2	< 0.1 (BCF; 60 days; Oncorhynchus tshawytscha; Flow-through system; Fresh water; Weight of evidence)
Log Pow	-1.09 (Experimental value; EU Method A.8: Partition Coefficient; 22 °C)
Bioaccumulative potential	Low bioaccumulation potential (BCF < 500).
barium nitrate (10022-31-8)	
Bioaccumulative potential	Not bioaccumulative.
ammonium hexafluorosilicate (16919-19-0)	
Bioaccumulative potential	Bioaccumulation: No data available.
12.4. Mobility in soil	
12.4. Mobility in 30h	
boric acid (10043-35-3)	
Ecology - soil	May be harmful to plant growth, blooming and fruit formation.
12.5. Other adverse effects	
Effect on the global warming	: No known effects from this product.
GWPmix comment	: No known effects from this product.
SECTION 13: Disposal consideration	ons
13.1. Waste treatment methods	
Waste treatment methods	: Dispose of contents/container in accordance with licensed collector's sorting instructions.
Waste disposal recommendations	: Dispose in a safe manner in accordance with local/national regulations.
SECTION 14: Transport information	1
SECTION 14: Transport information Department of Transportation (DOT)	1
	1
Department of Transportation (DOT)	: UN3264 Corrosive liquid, acidic, inorganic, n.o.s. (CONTAINS ; nitric acid ; hydrofluoric acid), 8
Department of Transportation (DOT) In accordance with DOT	
Department of Transportation (DOT) In accordance with DOT	: UN3264 Corrosive liquid, acidic, inorganic, n.o.s. (CONTAINS ; nitric acid ; hydrofluoric acid), 8
Department of Transportation (DOT) In accordance with DOT Transport document description UN-No.(DOT)	: UN3264 Corrosive liquid, acidic, inorganic, n.o.s. (CONTAINS ; nitric acid ; hydrofluoric acid), 8 II
Department of Transportation (DOT) In accordance with DOT Transport document description	 UN3264 Corrosive liquid, acidic, inorganic, n.o.s. (CONTAINS ; nitric acid ; hydrofluoric acid), 8 II UN3264
Department of Transportation (DOT) In accordance with DOT Transport document description UN-No.(DOT)	 UN3264 Corrosive liquid, acidic, inorganic, n.o.s. (CONTAINS ; nitric acid ; hydrofluoric acid), 8 UN3264 Corrosive liquid, acidic, inorganic, n.o.s.
Department of Transportation (DOT) In accordance with DOT Transport document description UN-No.(DOT) Proper Shipping Name (DOT)	 UN3264 Corrosive liquid, acidic, inorganic, n.o.s. (CONTAINS ; nitric acid ; hydrofluoric acid), 8 II UN3264 Corrosive liquid, acidic, inorganic, n.o.s. CONTAINS ; nitric acid ; hydrofluoric acid
Department of Transportation (DOT) In accordance with DOT Transport document description UN-No.(DOT) Proper Shipping Name (DOT) Class (DOT)	 UN3264 Corrosive liquid, acidic, inorganic, n.o.s. (CONTAINS ; nitric acid ; hydrofluoric acid), 8 II UN3264 Corrosive liquid, acidic, inorganic, n.o.s. CONTAINS ; nitric acid ; hydrofluoric acid 8 - Class 8 - Corrosive material 49 CFR 173.136
Department of Transportation (DOT) In accordance with DOT Transport document description UN-No.(DOT) Proper Shipping Name (DOT) Class (DOT) Packing group (DOT)	 UN3264 Corrosive liquid, acidic, inorganic, n.o.s. (CONTAINS ; nitric acid ; hydrofluoric acid), 8 II UN3264 Corrosive liquid, acidic, inorganic, n.o.s. CONTAINS ; nitric acid ; hydrofluoric acid 8 - Class 8 - Corrosive material 49 CFR 173.136 II - Medium Danger
Department of Transportation (DOT) In accordance with DOT Transport document description UN-No.(DOT) Proper Shipping Name (DOT) Class (DOT) Packing group (DOT) Hazard labels (DOT)	 UN3264 Corrosive liquid, acidic, inorganic, n.o.s. (CONTAINS ; nitric acid ; hydrofluoric acid), 8 II UN3264 Corrosive liquid, acidic, inorganic, n.o.s. CONTAINS ; nitric acid ; hydrofluoric acid 8 - Class 8 - Corrosive material 49 CFR 173.136 II - Medium Danger
Department of Transportation (DOT) In accordance with DOT Transport document description UN-No.(DOT) Proper Shipping Name (DOT) Class (DOT) Packing group (DOT)	 : UN3264 Corrosive liquid, acidic, inorganic, n.o.s. (CONTAINS ; nitric acid ; hydrofluoric acid), 8 II : UN3264 : Corrosive liquid, acidic, inorganic, n.o.s. CONTAINS ; nitric acid ; hydrofluoric acid : 8 - Class 8 - Corrosive material 49 CFR 173.136 : II - Medium Danger : 8 - Corrosive

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DOT Special Provisions (49 CFR 172.102)		
	:	B2 - MC 300, MC 301, MC 302, MC 303, MC 305, and MC 306 and DOT 406 cargo tanks are not authorized IBCs: Metal (31A, 31B and 31N); Rigid plastics (31H1 and 31H2); Composite
		(31HZ1). Additional Requirement: Only liquids with a vapor pressure less than or equal to 110 kPa at 50 C (1.1 bar at 122 F), or 130 kPa at 55 C (1.3 bar at 131 F) are authorized T11 - 6 178.274(d)(2) Normal
		TP2 - a. The maximum degree of filling must not exceed the degree of filling determined by the following: (image) Where: tr is the maximum mean bulk temperature during transport, tf is the
		temperature in degrees celsius of the liquid during filling, and a is the mean coefficient of cubical expansion of the liquid between the mean temperature of the liquid during filling (tf) and the maximum mean bulk temperature during transportation (tr) both in degrees celsius. b. For
		liquids transported under ambient conditions may be calculated using the formula: (image) Where: d15 and d50 are the densities (in units of mass per unit volume) of the liquid at 15 C (59 F) and 50 C (122 F), respectively
		TP27 - A portable tank having a minimum test pressure of 4 bar (400 kPa) may be used provided the calculated test pressure is 4 bar or less based on the MAWP of the hazardous material, as defined in 178.275 of this subchapter, where the test pressure is 1.5 times the MAWP
DOT Packaging Exceptions (49 CFR 173.xxx)		154
DOT Quantity Limitations Passenger aircraft/rail (49 CFR 173.27)		
DOT Quantity Limitations Cargo aircraft only (49 CFR 175.75)) :	30 L
DOT Vessel Stowage Location	:	B - (i) The material may be stowed "on deck" or "under deck" on a cargo vessel and on a passenger vessel carrying a number of passengers limited to not more than the larger of 25 passengers, or one passenger per each 3 m of overall vessel length; and (ii) "On deck only" on
		passenger vessels in which the number of passengers specified in paragraph (k)(2)(i) of this section is exceeded
DOT Vessel Stowage Other	:	40 - Stow "clear of living quarters"
Emergency Response Guide (ERG) Number	:	154
Other information	:	No supplementary information available.
TDG		
TDG Transport document description	:	UN3264 CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. (CONTAINS ; nitric acid ; hydrofluoric acid), 8, II
Transport document description		hydrofluoric acid), 8, II
Transport document description UN-No. (TDG)	:	hydrofluoric acid), 8, II UN3264
Transport document description UN-No. (TDG) Proper Shipping Name (TDG) TDG Primary Hazard Classes	:	hydrofluoric acid), 8, II UN3264 CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. 8 - Class 8 - Corrosives
Transport document description UN-No. (TDG) Proper Shipping Name (TDG)	:	hydrofluoric acid), 8, II UN3264 CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. 8 - Class 8 - Corrosives II - Medium Danger 16 - (1) The technical name of at least one of the most dangerous substances that predominantly contributes to the hazard or hazards posed by the dangerous goods must be
Transport document description UN-No. (TDG) Proper Shipping Name (TDG) TDG Primary Hazard Classes Packing group	:	hydrofluoric acid), 8, II UN3264 CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. 8 - Class 8 - Corrosives II - Medium Danger 16 - (1) The technical name of at least one of the most dangerous substances that predominantly contributes to the hazard or hazards posed by the dangerous goods must be shown, in parentheses, on the shipping document following the shipping name in accordance with clause 3.5(1)(c)(ii)(A) of Part 3 (Documentation). The technical name must also be shown,
Transport document description UN-No. (TDG) Proper Shipping Name (TDG) TDG Primary Hazard Classes Packing group	:	hydrofluoric acid), 8, II UN3264 CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. 8 - Class 8 - Corrosives II - Medium Danger 16 - (1) The technical name of at least one of the most dangerous substances that predominantly contributes to the hazard or hazards posed by the dangerous goods must be shown, in parentheses, on the shipping document following the shipping name in accordance
Transport document description UN-No. (TDG) Proper Shipping Name (TDG) TDG Primary Hazard Classes Packing group	:	hydrofluoric acid), 8, II UN3264 CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. 8 - Class 8 - Corrosives II - Medium Danger 16 - (1) The technical name of at least one of the most dangerous substances that predominantly contributes to the hazard or hazards posed by the dangerous goods must be shown, in parentheses, on the shipping document following the shipping name in accordance with clause 3.5(1)(c)(ii)(A) of Part 3 (Documentation). The technical name must also be shown, in parentheses, on a small means of containment or on a tag following the shipping name in accordance with subsections 4.11(2) and (3) of Part 4 (Dangerous Goods Safety Marks). (2) Despite subsection (1), the technical name for the following dangerous goods is not required to be shown on a shipping document or on a small means of containment when Canadian law for domestic transport or an international convention for international transport prohibits the
Transport document description UN-No. (TDG) Proper Shipping Name (TDG) TDG Primary Hazard Classes Packing group	:	hydrofluoric acid), 8, II UN3264 CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. 8 - Class 8 - Corrosives II - Medium Danger 16 - (1) The technical name of at least one of the most dangerous substances that predominantly contributes to the hazard or hazards posed by the dangerous goods must be shown, in parentheses, on the shipping document following the shipping name in accordance with clause 3.5(1)(c)(ii)(A) of Part 3 (Documentation). The technical name must also be shown, in parentheses, on a small means of containment or on a tag following the shipping name in accordance with subsections 4.11(2) and (3) of Part 4 (Dangerous Goods Safety Marks). (2) Despite subsection (1), the technical name for the following dangerous goods is not required to be shown on a shipping document or on a small means of containment when Canadian law for
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Transport document description UN-No. (TDG) Proper Shipping Name (TDG) TDG Primary Hazard Classes Packing group TDG Special Provisions	::	hydrofluoric acid), 8, II UN3264 CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. 8 - Class 8 - Corrosives II - Medium Danger 16 - (1) The technical name of at least one of the most dangerous substances that predominantly contributes to the hazard or hazards posed by the dangerous goods must be shown, in parentheses, on the shipping document following the shipping name in accordance with clause 3.5(1)(c)(ii)(A) of Part 3 (Documentation). The technical name must also be shown, in parentheses, on a small means of containment or on a tag following the shipping name in accordance with subsections 4.11(2) and (3) of Part 4 (Dangerous Goods Safety Marks). (2) Despite subsection (1), the technical name for the following dangerous goods is not required to be shown on a shipping document or on a small means of containment when Canadian law for domestic transport or an international convention for international transport prohibits the disclosure of the technical name: (a)UN1544, ALKALOID SALTS, SOLID, N.O.S. or ALKALOIDS, SOLID, N.O.S; (b)UN1851, MEDICINE, LIQUID, TOXIC, N.O.S; (c)UN3140, ALKALOID SALTS, LIQUID, N.O.S; or (e)UN3249, MEDICINE, SOLID, TOXIC, N.O.S. An example in Canada is the "Food and Drugs Act". (3) Despite subsection (1), the technical name for the following dangerous goods is not required to be shown on a small means of containment: (a)UN2814, INFECTIOUS SUBSTANCE, AFFECTING HUMANS; or (b)UN2900, INFECTIOUS SUBSTANCE, AFFECTING ANIMALS. SOR/2014-306 1 L

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Transport by sea	
UN-No. (IMDG)	: 3264
Proper Shipping Name (IMDG)	: CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S.
Class (IMDG)	: 8 - Corrosive substances
Packing group (IMDG)	: II - substances presenting medium danger
Limited quantities (IMDG)	: 1L
Air transport	

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UN-No. (IATA)	: 3264
Proper Shipping Name (IATA)	: Corrosive liquid, acidic, inorganic, n.o.s.
Class (IATA)	: 8 - Corrosives
Packing group (IATA)	: II - Medium Danger

SECTION 15: Regulatory information

15.1. US Federal regulations

nitric acid (7697-37-2)	
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Listed on the United States TSCA (Toxic Substances Control Act) inventory Subject to reporting requirements of United States SARA Section 313	
CERCLA RQ	1000 lb
SARA Section 302 Threshold Planning Quantity (TPQ)	1000 lb
hydrofluoric acid (7664-39-3)	
Listed on the United States TSCA (Toxic Substan Subject to reporting requirements of United States	
EPA TSCA Regulatory Flag	T - T - indicates a substance that is the subject of a Section 4 test rule under TSCA
CERCLA RQ	100 lb
SARA Section 302 Threshold Planning Quantity (TPQ)	100 lb
silver nitrate (7761-88-8)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory Subject to reporting requirements of United States SARA Section 313	
CERCLA RQ	1 lb
boric acid (10043-35-3)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	
barium nitrate (10022-31-8)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	
ammonium hexafluorosilicate (16919-19-0)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory Not subject to reporing requirements of the United States SARA Section 313	
CERCLA RQ	1000 lb

CANADA

No additional information available

EU-Regulations No additional information available

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

National regulations No additional information available

15.3. US State regulations

No additional information available

SECTION 16: C	· information
Revision date	: 09/10/2016
Full text of H-phrase	
H272	May intensify fire; oxidizer
H290	May be corrosive to metals
H300	Fatal if swallowed
H301	Toxic if swallowed
H302	Harmful if swallowed
H310	Fatal in contact with skin
H311	Toxic in contact with skin
H314	Causes severe skin burns and eye damage
H330	Fatal if inhaled
H331	Toxic if inhaled
H360	May damage fertility or the unborn child
H400	Very toxic to aquatic life
H401	Toxic to aquatic life
H410	Very toxic to aquatic life with long lasting effects
NFPA health hazard	2 - Intense or continued exposure could cause temporary incapacitation or possible residual injury unless prompt medical attention is given.
NFPA fire hazard	: 0 - Materials that will not burn.
NFPA reactivity	: 0 - Normally stable, even under fire exposure conditions, and are not reactive with water.
HMIS III Rating	•
Health	: 2 Moderate Hazard - Temporary or minor injury may occur
Flammability	: 0 Minimal Hazard - Materials that will not burn
Physical	 0 Minimal Hazard - Materials that are normally stable, even under fire conditions, and will NOT react with water, polymerize, decompose, condense, or self-react. Non-Explosives.
Personal protection	: C
	C - Safety glasses, Gloves, Synthetic apron

SDS US (GHS HazCom 2012)

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.