

Printing date 03/31/2019 Version Number 2 Reviewed on 03/31/2019

1 Identification

· Product identifier

· Trade name: Base/Neutrals Extractables Standard (1X1 mL)

· Part number: SVM-113-1

· Application of the substance / the mixture Reagents and Standards for Analytical Chemical Laboratory Use

· Details of the supplier of the safety data sheet

· Manufacturer/Supplier:

Agilent Technologies, Inc. 5301 Stevens Creek Blvd. Santa Clara, CA 95051 USA

· Information department:

Telephone: 800-227-9770

e-mail: pdl-msds author@agilent.com

· Emergency telephone number: CHEMTREC®: 1-800-424-9300

2 Hazard(s) identification

· Classification of the substance or mixture



GHS08 Health hazard

Carc. 1A H350 May cause cancer.

STOT RE 2 H373 May cause damage to organs through prolonged or repeated exposure.



Acute Tox. 4 H302 Harmful if swallowed.

Skin Irrit. 2 H315 Causes skin irritation.

Eye Irrit. 2A H319 Causes serious eye irritation.

STOT SE 3 H335 May cause respiratory irritation.

- · Label elements
- · GHS label elements The product is classified and labeled according to the Globally Harmonized System (GHS).
- · Hazard pictograms





GHS07

- · Signal word Danger
- · Hazard-determining components of labeling:

dichloromethane

dimethylnitrosoamine

benzo[a]pyrene

benzidine

· Hazard statements

Harmful if swallowed.

Causes skin irritation.



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Causes serious eye irritation.

May cause cancer.

May cause respiratory irritation.

May cause damage to organs through prolonged or repeated exposure.

Precautionary statements

Obtain special instructions before use.

Do not handle until all safety precautions have been read and understood.

Do not breathe dust/fume/gas/mist/vapors/spray.

Wash thoroughly after handling.

Do not eat, drink or smoke when using this product.

Use only outdoors or in a well-ventilated area.

Wear protective gloves/protective clothing/eye protection/face protection.

If swallowed: Call a poison center/doctor if you feel unwell.

Rinse mouth.

If on skin: Wash with plenty of water.

IF INHALED: Remove person to fresh air and keep comfortable for breathing.

If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.

Continue rinsing.

IF exposed or concerned: Get medical advice/attention.

Specific treatment (see on this label).

Get medical advice/attention if you feel unwell.

Take off contaminated clothing and wash it before reuse.

If skin irritation occurs: Get medical advice/attention.

If eye irritation persists: Get medical advice/attention.

Store in a well-ventilated place. Keep container tightly closed.

Store locked up.

Dispose of contents/container in accordance with local/regional/national/international regulations.

- · Classification system:
- · NFPA ratings (scale 0 4)



Health = 2Fire = 0

Reactivity = 0

· HMIS-ratings (scale 0 - 4)



Health = *2

Fire = 0

- · Other hazards
- · Results of PBT and vPvB assessment
- · **PBT**: Not applicable.
- · vPvB: Not applicable.

3 Composition/information on ingredients

- · Chemical characterization: Mixtures
- · **Description:** Mixture of the substances listed below with nonhazardous additions.
- · Dangerous components:

75-09-2 dichloromethane

99.698%

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	(Co	ontd. of page 2)
62-75-9	dimethylnitrosoamine	0.0377%
50-32-8	benzo[a]pyrene	0.0377%
92-87-5	benzidine	0.0377%

4 First-aid measures

- · Description of first aid measures
- · General information:

Immediately remove any clothing soiled by the product.

Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.

- After inhalation: In case of unconsciousness place patient stably in side position for transportation.
- · After skin contact: Immediately wash with water and soap and rinse thoroughly.
- · After eye contact:

Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.

- · After swallowing: Immediately call a doctor.
- Information for doctor:
- · Most important symptoms and effects, both acute and delayed No further relevant information available.
- · Indication of any immediate medical attention and special treatment needed

No further relevant information available.

5 Fire-fighting measures

- · Extinguishing media
- · Suitable extinguishing agents: Use fire fighting measures that suit the environment.
- · Special hazards arising from the substance or mixture

During heating or in case of fire poisonous gases are produced.

- · Advice for firefighters
- · Protective equipment: Mouth respiratory protective device.

6 Accidental release measures

- · Personal precautions, protective equipment and emergency procedures Mount respiratory protective device.
- Environmental precautions: Do not allow to enter sewers/ surface or ground water.
- · Methods and material for containment and cleaning up:

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

Dispose contaminated material as waste according to item 13.

Ensure adequate ventilation.

· Reference to other sections

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

· Protective Action Criteria for Chemicals

1100000	ive rection criteria for chemicals	
· PAC-1:		
75-09	0-2 dichloromethane	200 ppm
7005-72	4-chlorophenyl phenyl ether	1.5 mg/m ³
117-84	l-0 dioctyl phthalate	41 mg/m ³
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62-75-9	dimethylnitrosoamine	((Contd. of page $0.082~{ m mg/m^3}$	
			1.2 mg/m ³	
	benzo[a]pyrene		0.6 mg/m^3	
	benzo[ghi]perylene		30 mg/m^3	
	benzidine		0.93 mg/m^3	
PAC-2:				
75-09-2	dichloromethane		560 ppm	
7005-72-3	4-chlorophenyl phenyl ether		35 mg/m ³	
117-84-0	dioctyl phthalate		450 mg/m	
62-75-9	dimethylnitrosoamine		0.9 mg/m ³	
193-39-5	indeno[1,2,3-cd]pyrene		13 mg/m ³	
50-32-8	benzo[a]pyrene		120 mg/m	
191-24-2	benzo[ghi]perylene		330 mg/m	
92-87-5	7-5 benzidine		10 mg/m ³	
PAC-3:				
	dichloromethane	6,9	900 ppm	
7005-72-3	4-chlorophenyl phenyl ether	21	0 mg/m^3	
	dioctyl phthalate	11	11000* mg/m³	
62-75-9	dimethylnitrosoamine	10	10 mg/m ³	
193-39-5	indeno[1,2,3-cd]pyrene	79	79 mg/m ³	
	benzo[a]pyrene 700 mg		00 mg/m³	
	2 benzo[ghi]perylene 2,000		000 mg/m^3	
92-87-5	benzidine	61	mg/m³	

7 Handling and storage

- · Handling:
- · Precautions for safe handling

Ensure good ventilation/exhaustion at the workplace.

Open and handle receptacle with care.

Prevent formation of aerosols.

- Information about protection against explosions and fires: Keep respiratory protective device available.
- · Conditions for safe storage, including any incompatibilities
- · Storage:
- Requirements to be met by storerooms and receptacles: No special requirements.
- · Information about storage in one common storage facility: Not required.
- Further information about storage conditions: Keep receptacle tightly sealed.
- · Specific end use(s) No further relevant information available.

8 Exposure controls/personal protection

· Additional information about design of technical systems: No further data; see item 7.

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· Control parameters

Cont	for parameters			
· Com	ponents with limit values that require monitoring at the workplace:			
75-09	75-09-2 dichloromethane			
PEL	Short-term value: 125 ppm Long-term value: 25 ppm see 29 CFR 1910.1052			
REL	See Pocket Guide App. A			
TLV	Long-term value: 174 mg/m³, 50 ppm BEI			
62-75	5-9 dimethylnitrosoamine			
PEL	see 29 CFR 1910.1003			
REL	See Pocket Guide App. A			
TLV	Skin; L			
50-32	2-8 benzo[a]pyrene			
PEL	Long-term value: 0.2 mg/m³ see Coal tar pitch volatiles			
REL	Long-term value: 0.1 mg/m³ Coal tar pitch volatile; Pocket Guide Apps. A+C			
TLV	L; BEIp			
92-87	7-5 benzidine			
PEL	see 29 CFR 1910.1003			
DEI	See Booket Guide Apps, A and C			

REL See Pocket Guide Apps. A and C

TLV Skin; L

· Ingredients with biological limit values:

75-09-2 dichloromethane

BEI 0.3 mg/L

Medium: urine Time: end of shift

Parameter: Dichloromethane (semi-quantitative)

50-32-8 benzo[a]pyrene

BEI -

Medium: urine

Time: end of shift at end of workweek

Parameter: 1-Hydroxypyrene with hydrolysis (nonquantitative)

- · Additional information: The lists that were valid during the creation were used as basis.
- · Exposure controls
- · Personal protective equipment:
- General protective and hygienic measures:

Keep away from foodstuffs, beverages and feed.

Immediately remove all soiled and contaminated clothing.

Wash hands before breaks and at the end of work.

Store protective clothing separately.

Avoid contact with the eyes and skin.

· Breathing equipment:

When used as intended with Agilent instruments, the use of the product under normal laboratory conditions and with standard practices does not result in significant airborne exposures and therefore respiratory protection is not (Contd. on page 6)



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needed.

Under an emergency condition where a respirator is deemed necessary, use a NIOSH or equivalent approved device/equipment with appropriate organic or acid gas cartridge.

· Protection of hands:

Although not recommended for constant contact with the chemicals or for clean-up, nitrile gloves 11-13 mil thickness are recommended for normal use. The breakthrough time is 1 hr. For cleaning a spill where there is direct contact of the chemical, butyl rubber gloves are recommended 12-15 mil thickness with breakthrough times exceeding 4 hrs. Supplier recommendations should be followed.

· Material of gloves

For normal use: nitrile rubber, 11-13 mil thickness

For direct contact with the chemical: butyl rubber, 12-15 mil thickness

· Penetration time of glove material

For normal use: nitrile rubber: 1 hour

For direct contact with the chemical: butyl rubber: >4 hours

• Eye protection: Safety glasses



Tightly sealed goggles

9 Physical and chemical properties

· Information on basic physical and chemical properties · General Information		
· Appearance:	E1 '1	
Form: Color:	Fluid Colorless	
· Odor:	Like chlorine	
Odor threshold:	Not determined.	
· pH-value:	Not determined.	
· Change in condition		
Melting point/Melting range:	-95.1 °C (-139.2 °F)	
Boiling point/Boiling range:	40 °C (104 °F)	
· Flash point:	Not applicable.	
· Flammability (solid, gaseous):	Not applicable.	
· Ignition temperature:	605 °C (1,121 °F)	
· Decomposition temperature:	Not determined.	
· Auto igniting:	Product is not selfigniting.	
· Danger of explosion:	Product does not present an explosion hazard.	
· Explosion limits:		
Lower:	13 Vol %	
Upper:	22 Vol %	
· Vapor pressure at 20 °C (68 °F):	360 hPa (270 mm Hg)	
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· Density at 20 °C (68 °F):	1.3 g/cm³ (10.8485 lbs/gal)	
· Relative density	Not determined.	
· Vapor density	Not determined.	
Evaporation rate	Not determined.	
· Solubility in / Miscibility with		
Water at 20 °C (68 °F):	20 g/l	
· Partition coefficient (n-octanol/wa	ter): Not determined.	
· Viscosity:		
Dynamic:	Not determined.	
Kinematic:	Not determined.	
Solvent content:		
Organic solvents:	99.7 %	
VOC content:	0.00 %	
	0.0 g/l / 0.00 lb/gal	
Solids content:	0.2 %	
· Other information	No further relevant information available.	

10 Stability and reactivity

- · Reactivity No further relevant information available.
- · Chemical stability
- Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.
- · Possibility of hazardous reactions No dangerous reactions known.
- · Conditions to avoid No further relevant information available.
- · Incompatible materials: No further relevant information available.
- · Hazardous decomposition products: No dangerous decomposition products known.

11 Toxicological information

- · Information on toxicological effects

· Acute tox	icity:	
· LD/LC50	values tha	t are relevant for classification:
ATE (Acu	ite Toxicity	y Estimate)
Oral	LD50	1,605 mg/kg (rat)
Dermal	LD50	>2,006 mg/kg (rat)
Inhalative	LC50/4 h	88.3 mg/L (rat)
75-09-2 di	chloromet	hane
Oral	LD50	1,600 mg/kg (rat)
Dermal	LD50	>2,000 mg/kg (rat)
Inhalative	LC50/4 h	88 mg/L (rat)
62-75-9 di	methylnit	rosoamine
Oral	LD50	37 mg/kg (rat)
		(Contd. on page



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Inhalative	LC50/4 h	78 mg/L (rat)	Zonid. of page 7
92-87-5 b	enzidine		
Oral	LD50	309 mg/kg (rat)	

- · Primary irritant effect:
- on the skin: Irritant to skin and mucous membranes.
- · on the eye: Irritating effect.
- · Sensitization: No sensitizing effects known.
- · Additional toxicological information:

The product shows the following dangers according to internally approved calculation methods for preparations: Harmful

Irritant

· Carcinogenic categories

IADC (I	di la Constantina	
,	ternational Agency for Research on Cancer)	
75-09-2	dichloromethane	2A
62-75-9	dimethylnitrosoamine	2A
193-39-5	indeno[1,2,3-cd]pyrene	2B
207-08-9	benzo[k]fluoranthene	2B
50-32-8	benzo[a]pyrene	1
191-24-2	benzo[ghi]perylene	3
92-87-5	benzidine	1
· NTP (Na	tional Toxicology Program)	
75-09-2	dichloromethane	R
62-75-9	dimethylnitrosoamine	R
193-39-5	indeno[1,2,3-cd]pyrene	R
207-08-9	benzo[k]fluoranthene	R
50-32-8	benzo[a]pyrene	R
92-87-5	benzidine	K
· OSHA-C	a (Occupational Safety & Health Administration)	•
75-09-2	lichloromethane	
62-75-9	limethylnitrosoamine	
92-87-5 l	penzidine	

12 Ecological information

- · Toxicity
- · Aquatic toxicity: No further relevant information available.
- · Persistence and degradability No further relevant information available.
- Behavior in environmental systems:
- · Bioaccumulative potential No further relevant information available.
- · Mobility in soil No further relevant information available.
- · Additional ecological information:
- · General notes:

Water hazard class 3 (Self-assessment): extremely hazardous for water

Do not allow product to reach ground water, water course or sewage system, even in small quantities.

Danger to drinking water if even extremely small quantities leak into the ground.

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- · Results of PBT and vPvB assessment
- · **PBT:** Not applicable. · **vPvB:** Not applicable.
- · Other adverse effects No further relevant information available.

13 Disposal considerations

- · Waste treatment methods
- · Recommendation:

Must not be disposed of together with household garbage. Do not allow product to reach sewage system.

- · Uncleaned packagings:
- · Recommendation: Disposal must be made according to official regulations.

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· Not Regulated, De minimus Quantities	-
· UN-Number · DOT, IMDG, IATA	UN1593
· UN proper shipping name · DOT · IMDG, IATA	Dichloromethane DICHLOROMETHANE
· Transport hazard class(es)	
· DOT, IMDG, IATA	
· Class	6.1 Toxic substances
· Label	6.1
Packing group DOT, IMDG, IATA	III
· Environmental hazards:	Not applicable.
 Special precautions for user Danger code (Kemler): EMS Number: Segregation groups Stowage Category 	Warning: Toxic substances 60 F-A,S-A Liquid halogenated hydrocarbons A
Transport in bulk according to Annex II MARPOL73/78 and the IBC Code	of Not applicable.
· Transport/Additional information:	
· DOT · Quantity limitations	On passenger aircraft/rail: 60 L On cargo aircraft only: 220 L
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· Hazardous substance: 1000 lbs, 454 kg

· IMDG
· Limited quantities (LQ) 5L
· Excepted quantities (EQ) Code: E1

Maximum net quantity per inner packaging: 30 ml

Maximum net quantity per outer packaging: 1000 ml

UN 1593 DICHLOROMETHANE, 6.1, III

15 Regulatory information

· UN "Model Regulation":

- · Safety, health and environmental regulations/legislation specific for the substance or mixture
- Sara
- · Section 355 (extremely hazardous substances):

62-75-9 dimethylnitrosoamine

· Section 313 (Specific toxic chemical listings):

- 75-09-2 dichloromethane
- 62-75-9 dimethylnitrosoamine
- 193-39-5 indeno[1,2,3-cd]pyrene
- 207-08-9 benzo[k]fluoranthene 50-32-8 benzo[a]pyrene
- 191-24-2 benzo[ghi]perylene
- 92-87-5 benzidine

· TSCA (Toxic Substances Control Act):

- 75-09-2 dichloromethane
- 7005-72-3 4-chlorophenyl phenyl ether
- 117-84-0 dioctyl phthalate
 - 62-75-9 dimethylnitrosoamine
- 193-39-5 indeno[1,2,3-cd]pyrene
 - 50-32-8 benzo[a]pyrene
 - 92-87-5 benzidine

· TSCA new (21st Century Act): (Substances not listed)

- 62-75-9 dimethylnitrosoamine
- 92-87-5 benzidine
- · Proposition 65

· Chemicals known to cause cancer:

- 75-09-2 dichloromethane
- 62-75-9 dimethylnitrosoamine
- 193-39-5 indeno[1,2,3-cd]pyrene
- 207-08-9 benzo[k]fluoranthene
- 50-32-8 benzo[a]pyrene
- 92-87-5 benzidine

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· Chemicals known to cause reproductive toxicity for females:

None of the ingredients is listed.

· Chemicals known to cause reproductive toxicity for males:

None of the ingredients is listed.

· Chemicals known to cause developmental toxicity:

None of the ingredients is listed.

· Carcinogenic categories

cui cino	Seme entegories		
· EPA (Eı	vironmental Protection Agency)		
75-09-2	dichloromethane	I	L
62-75-9	dimethylnitrosoamine	I	B2
193-39-5	indeno[1,2,3-cd]pyrene	I	B2
207-08-9	benzo[k]fluoranthene	I	B2
50-32-8	benzo[a]pyrene	(СаН
191-24-2	benzo[ghi]perylene	I	D
92-87-5	benzidine	I	A
· TLV (T	rreshold Limit Value established by ACGIH)		
75-09-2	dichloromethane		A3
62-75-9	dimethylnitrosoamine		A3
50-32-8	benzo[a]pyrene		A2
92-87-5	benzidine		A1
· NIOSH-	Ca (National Institute for Occupational Safety and Health)		
75-09-2	dichloromethane		
62-75-9	dimethylnitrosoamine		
50-32-8	benzo[a]pyrene		
92-87-5	benzidine		

· National regulations:

· Additional classification according to Decree on Hazardous Materials:

Carcinogenic hazardous material group III (dangerous).

· Information about limitation of use:

Workers are not allowed to be exposed to the hazardous carcinogenic materials contained in this preparation. Exceptions can be made by the authorities in certain cases.

· Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

16 Other information

The information contained in this document is based on Agilent's state of knowledge at the time of preparation. No warranty as to its accurateness, completeness or suitability for a particular purpose is expressed or implied.

- · Department issuing SDS: Document Control / Regulatory
- · Contact: regulatory@ultrasci.com
- · Date of preparation / last revision 03/31/2019 / 1
- · Abbreviations and acronyms:

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

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DOT: US Department of Transportation IATA: International Air Transport Association

ACGIH: American Conference of Governmental Industrial Hygienists EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

NFPA: National Fire Protection Association (USA)

HMIS: Hazardous Materials Identification System (USA)

VOC: Volatile Organic Compounds (USA, EU)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic vPvB: very Persistent and very Bioaccumulative NIOSH: National Institute for Occupational Safety

OSHA: Occupational Safety & Health TLV: Threshold Limit Value PEL: Permissible Exposure Limit

REL: Recommended Exposure Limit BEI: Biological Exposure Limit

Acute Tox. 4: Acute toxicity - Category 4

Skin Irrit. 2: Skin corrosion/irritation – Category 2

Eye Irrit. 2A: Serious eye damage/eye irritation – Category 2A

Carc. 1A: Carcinogenicity - Category 1A

STOT SE 3: Specific target organ toxicity (single exposure) – Category 3 STOT RE 2: Specific target organ toxicity (repeated exposure) – Category 2

* Data compared to the previous version altered.

US