Agilent Technologies

Safety Data Sheet
acc. to OSHA HCS

Printing date 08/08/2018 Version Number 3 Reviewed on 08/08/2018

*

1 Identification

· **Product identifier**

· **Trade name: Semi-Volatile Standard**

· **Part number:** SVM-525-1
· **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**


GHS02 Flame

Flam. Liq. 2 H225 Highly flammable liquid and vapor.


GHS08 Health hazard

Carc. 1B H350 May cause cancer.


GHS07

Eye Irrit. 2A H319 Causes serious eye irritation.
STOT SE 3 H336 May cause drowsiness or dizziness.

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


GHS02 GHS07 GHS08

· **Signal word** Danger

· **Hazard-determining components of labeling:**
acetone
dibenz[a,h]anthracene
benzo[a]pyrene
· **Hazard statements**
Highly flammable liquid and vapor.
Causes serious eye irritation.
May cause cancer.

(Contd. on page 2)

Agilent Technologies

Safety Data Sheet
acc. to OSHA HCS

Printing date 08/08/2018 Version Number 3 Reviewed on 08/08/2018

Trade name: Semi-Volatile Standard

(Contd. of page 1)

May cause drowsiness or dizziness.

· **Precautionary statements**
Obtain special instructions before use.
Do not handle until all safety precautions have been read and understood.
Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
Ground/bond container and receiving equipment.
Use explosion-proof electrical/ventilating/lighting/equipment.
Use only non-sparking tools.
Take precautionary measures against static discharge.
Avoid breathing dust/fume/gas/mist/vapors/spray
Wash thoroughly after handling.
Use only outdoors or in a well-ventilated area.
Wear protective gloves/protective clothing/eye protection/face protection.
If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
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.
Call a poison center/doctor if you feel unwell.
If eye irritation persists: Get medical advice/attention.
In case of fire: Use for extinction: CO2, powder or water spray.
Store in a well-ventilated place. Keep container tightly closed.
Store in a well-ventilated place. Keep cool.
Store locked up.
Dispose of contents/container in accordance with local/regional/national/international regulations.

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

Health = 2
Fire = 3
Reactivity = 0

· **HMIS-ratings (scale 0 - 4)**

Health = *2
Fire = 3
Reactivity = 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:**		
67-64-1	acetone	99.546%
53-70-3	dibenz[a,h]anthracene	0.0126%

(Contd. on page 3)

Agilent Technologies

Safety Data Sheet
acc. to OSHA HCS

Printing date 08/08/2018 Version Number 3 Reviewed on 08/08/2018

Trade name: Semi-Volatile Standard

(Contd. of page 2)

50-32-8	benzo[a]pyrene	0.0126%

4 First-aid measures

· **Description of first aid measures**
· **After inhalation:** Supply fresh air; consult doctor in case of complaints.
· **After skin contact:** Generally the product does not irritate the skin.
· **After eye contact:**
Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.
· **After swallowing:** If symptoms persist consult 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:**
CO2, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
· **For safety reasons unsuitable extinguishing agents:** Water with full jet
· **Special hazards arising from the substance or mixture** No further relevant information available.
· **Advice for firefighters**
· **Protective equipment:** No special measures required.

*

6 Accidental release measures

· **Personal precautions, protective equipment and emergency procedures**
Wear protective equipment. Keep unprotected persons away.
· **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**

· **PAC-1:**		
67-64-1	acetone	200 ppm
78-59-1	3,5,5-trimethylcyclohex-2-enone	12 ppm
131-11-3	dimethyl phthalate	15 mg/m³
121-14-2	2,4-dinitrotoluene	0.6 mg/m³
606-20-2	2,6-dinitrotoluene	0.6 mg/m³
118-74-1	hexachlorobenzene	0.006 mg/m³
77-47-4	hexachlorocyclopentadiene	0.03 ppm
87-86-5	pentachlorophenol	1 mg/m³

(Contd. on page 4)

Trade name: Semi-Volatile Standard

(Contd. of page 3)

129-00-0	pyrene	0.15 mg/m³
86-73-7	fluorene	6.6 mg/m³
120-12-7	anthracene	48 mg/m³
85-01-8	phenanthrene	5.4 mg/m³
208-96-8	acenaphthylene	10 mg/m³
53-70-3	dibenz[a,h]anthracene	0.093 mg/m³
193-39-5	indeno[1,2,3-cd]pyrene	1.2 mg/m³
218-01-9	chrysene	0.6 mg/m³
205-99-2	benz[e]acephenanthrylene	0.12 mg/m³
50-32-8	benzo[a]pyrene	0.6 mg/m³
56-55-3	benz[a]anthracene	0.6 mg/m³
191-24-2	benzo[ghi]perylene	30 mg/m³
84-74-2	dibutyl phthalate	15 mg/m³
117-81-7	di-(2-ethylhexyl) phthalate	10 mg/m³
85-68-7	BBP	15 mg/m³
103-23-1	Di-(2-ethylhexyl) adipate	17 mg/m³
84-66-2	diethyl phthalate	15 mg/m³

· **PAC-2:**

67-64-1	acetone	3200* ppm
78-59-1	3,5,5-trimethylcyclohex-2-enone	33 ppm
131-11-3	dimethyl phthalate	1,600 mg/m³
121-14-2	2,4-dinitrotoluene	12 mg/m³
606-20-2	2,6-dinitrotoluene	47 mg/m³
118-74-1	hexachlorobenzene	14 mg/m³
77-47-4	hexachlorocyclopentadiene	0.55 ppm
87-86-5	pentachlorophenol	15 mg/m³
129-00-0	pyrene	1.7 mg/m³
86-73-7	fluorene	72 mg/m³
120-12-7	anthracene	530 mg/m³
85-01-8	phenanthrene	59 mg/m³
208-96-8	acenaphthylene	110 mg/m³
53-70-3	dibenz[a,h]anthracene	1 mg/m³
193-39-5	indeno[1,2,3-cd]pyrene	13 mg/m³
218-01-9	chrysene	12 mg/m³
205-99-2	benz[e]acephenanthrylene	1.3 mg/m³
50-32-8	benzo[a]pyrene	120 mg/m³
56-55-3	benz[a]anthracene	120 mg/m³
191-24-2	benzo[ghi]perylene	330 mg/m³
84-74-2	dibutyl phthalate	1,600 mg/m³
117-81-7	di-(2-ethylhexyl) phthalate	1,000 mg/m³
85-68-7	BBP	77 mg/m³
103-23-1	Di-(2-ethylhexyl) adipate	180 mg/m³
84-66-2	diethyl phthalate	300 mg/m³

(Contd. on page 5)

Trade name: Semi-Volatile Standard

(Contd. of page 4)

· **PAC-3:**		
67-64-1	acetone	5700* ppm
78-59-1	3,5,5-trimethylcyclohex-2-enone	200 ppm
131-11-3	dimethyl phthalate	9300* mg/m³
121-14-2	2,4-dinitrotoluene	200 mg/m³
606-20-2	2,6-dinitrotoluene	200 mg/m³
118-74-1	hexachlorobenzene	91 mg/m³
77-47-4	hexachlorocyclopentadiene	1 ppm
87-86-5	pentachlorophenol	150 mg/m³
129-00-0	pyrene	110 mg/m³
86-73-7	fluorene	430 mg/m³
120-12-7	anthracene	3,200 mg/m³
85-01-8	phenanthrene	360 mg/m³
208-96-8	acenaphthylene	660 mg/m³
53-70-3	dibenz[a,h]anthracene	2.9 mg/m³
193-39-5	indeno[1,2,3-cd]pyrene	79 mg/m³
218-01-9	chrysene	69 mg/m³
205-99-2	benz[e]acephenanthrylene	7.9 mg/m³
50-32-8	benzo[a]pyrene	700 mg/m³
56-55-3	benz[a]anthracene	700 mg/m³
191-24-2	benzo[ghi]perylene	2,000 mg/m³
84-74-2	dibutyl phthalate	9300* mg/m³
117-81-7	di-(2-ethylhexyl) phthalate	6,100 mg/m³
85-68-7	BBP	460 mg/m³
103-23-1	Di-(2-ethylhexyl) adipate	1,100 mg/m³
84-66-2	diethyl phthalate	1,800 mg/m³

7 Handling and storage

· **Handling:**
· **Precautions for safe handling** Ensure good ventilation/exhaustion at the workplace.
· **Information about protection against explosions and fires:**
Keep ignition sources away - Do not smoke.
Protect against electrostatic charges.

· **Conditions for safe storage, including any incompatibilities**
· **Storage:**
· **Requirements to be met by storerooms and receptacles:** Store in a cool location.
· **Information about storage in one common storage facility:** Not required.
· **Further information about storage conditions:**
Keep receptacle tightly sealed.
Store in cool, dry conditions in well sealed receptacles.
· **Specific end use(s)** No further relevant information available.

(Contd. on page 6)

(Contd. of page 5)

8 Exposure controls/personal protection

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

· **Control parameters**

· **Components with limit values that require monitoring at the workplace:**	
67-64-1 acetone	
PEL	Long-term value: 2400 mg/m³, 1000 ppm
REL	Long-term value: 590 mg/m³, 250 ppm
TLV	Short-term value: 1187 mg/m³, 500 ppm Long-term value: 594 mg/m³, 250 ppm BEI
50-32-8 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

· **Ingredients with biological limit values:**	
67-64-1 acetone	
BEI	50 mg/L Medium: urine Time: end of shift Parameter: Acetone (nonspecific)
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.
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 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.

(Contd. on page 7)

Agilent Technologies

Safety Data Sheet
acc. to OSHA HCS

Printing date 08/08/2018 Version Number 3 Reviewed on 08/08/2018

Trade name: Semi-Volatile Standard

(Contd. of page 6)

· **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:**

Tightly sealed goggles

*

9 Physical and chemical properties

· **Information on basic physical and chemical properties**	
· **General Information**	
· **Appearance:**	
Form:	Fluid
Color:	Colorless
· **Odor:**	Characteristic
· **Odor threshold:**	Not determined.
· **pH-value:**	Not determined.
· **Change in condition**	
Melting point/Melting range:	-94.7 °C (-138.5 °F)
Boiling point/Boiling range:	55.8-56.6 °C (132.4-133.9 °F)
· **Flash point:**	-17 °C (1.4 °F)
· **Flammability (solid, gaseous):**	Not applicable.
· **Ignition temperature:**	465 °C (869 °F)
· **Decomposition temperature:**	Not determined.
· **Auto igniting:**	Product is not selfigniting.
· **Danger of explosion:**	Product is not explosive. However, formation of explosive air/vapor mixtures are possible.
· **Explosion limits:**	
Lower:	2.6 Vol %
Upper:	13 Vol %
· **Vapor pressure at 20 °C (68 °F):**	175 hPa (131.3 mm Hg)
· **Density at 20 °C (68 °F):**	0.8 g/cm³ (6.676 lbs/gal)
· **Relative density**	Not determined.
· **Vapor density**	Not determined.
· **Evaporation rate**	Not determined.
· **Solubility in / Miscibility with**	
Water:	Not miscible or difficult to mix.
· **Partition coefficient (n-octanol/water):**	Not determined.

(Contd. on page 8)

Agilent Technologies

Safety Data Sheet
acc. to OSHA HCS

Printing date 08/08/2018 Version Number 3 Reviewed on 08/08/2018

Trade name: Semi-Volatile Standard

(Contd. of page 7)

· **Viscosity:**	
Dynamic at 20 °C (68 °F):	32 mPas
Kinematic:	Not determined.
· **Solvent content:**	
Organic solvents:	99.6 %
VOC content:	0.05 % 0.5 g/l / 0.00 lb/gl
Solids content:	0.3 %
· **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 toxicity:**

· **LD/LC50 values that are relevant for classification:**		
67-64-1 acetone		
Oral	LD50	5,800 mg/kg (rat)
Dermal	LD50	20,000 mg/kg (rabbit)

· **Primary irritant effect:**
· **on the skin:** No irritant effect.
· **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:
Irritant

· **Carcinogenic categories**

· **IARC (International Agency for Research on Cancer)**		
121-14-2	2,4-dinitrotoluene	2B
606-20-2	2,6-dinitrotoluene	2B
118-74-1	hexachlorobenzene	2B
87-86-5	pentachlorophenol	2B
129-00-0	pyrene	3
86-73-7	fluorene	3
120-12-7	anthracene	3
85-01-8	phenanthrene	3

(Contd. on page 9)

Trade name: Semi-Volatile Standard

(Contd. of page 8)

53-70-3	dibenz[a,h]anthracene	2A
193-39-5	indeno[1,2,3-cd]pyrene	2B
218-01-9	chrysene	2B
207-08-9	benzo[k]fluoranthene	2B
205-99-2	benz[e]acephenanthrylene	2B
50-32-8	benzo[a]pyrene	1
56-55-3	benz[a]anthracene	2B
191-24-2	benzo[ghi]perylene	3
117-81-7	di-(2-ethylhexyl) phthalate	2B
85-68-7	BBP	3
103-23-1	Di-(2-ethylhexyl) adipate	3

· **NTP (National Toxicology Program)**

118-74-1	hexachlorobenzene	R
87-86-5	pentachlorophenol	R
129-00-0	pyrene	R
86-73-7	fluorene	R
120-12-7	anthracene	R
85-01-8	phenanthrene	R
53-70-3	dibenz[a,h]anthracene	R
193-39-5	indeno[1,2,3-cd]pyrene	R
218-01-9	chrysene	R
207-08-9	benzo[k]fluoranthene	R
205-99-2	benz[e]acephenanthrylene	R
50-32-8	benzo[a]pyrene	R
56-55-3	benz[a]anthracene	R
117-81-7	di-(2-ethylhexyl) phthalate	R

· **OSHA-Ca (Occupational Safety & Health Administration)**

None of the ingredients is listed.

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

(Contd. on page 10)

Agilent Technologies

Safety Data Sheet
acc. to OSHA HCS

Printing date 08/08/2018 Version Number 3 Reviewed on 08/08/2018

Trade name: Semi-Volatile Standard

(Contd. of page 9)

· **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.

*

14 Transport information

· **UN-Number**	
· **DOT, IMDG, IATA**	UN1090
· **UN proper shipping name**	
· **DOT**	Acetone solution
· **IMDG**	ACETONE solution, MARINE POLLUTANT
· **IATA**	ACETONE solution
· **Transport hazard class(es)**	
· **DOT**	
· **Class**	3 Flammable liquids
· **Label**	3
· **IMDG**	
· **Class**	3 Flammable liquids
· **Label**	3
· **IATA**	
· **Class**	3 Flammable liquids
· **Label**	3
· **Packing group**	
· **DOT, IMDG, IATA**	II
· **Environmental hazards:**	Product contains environmentally hazardous substances: 2-chlorobiphenyl
· **Marine pollutant:**	Symbol (fish and tree)

(Contd. on page 11)

Trade name: Semi-Volatile Standard

(Contd. of page 10)

· **Special precautions for user**	Warning: Flammable liquids
· **Danger code (Kemler):**	33
· **EMS Number:**	F-E,S-D
· **Stowage Category**	B
· **Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code**	Not applicable.
· **Transport/Additional information:**	
· **DOT**	
· **Quantity limitations**	On passenger aircraft/rail: 5 L On cargo aircraft only: 60 L
· **IMDG**	
· **Limited quantities (LQ)**	1L
· **Excepted quantities (EQ)**	Code: E2 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 500 ml
· **UN "Model Regulation":**	UN 1090 ACETONE SOLUTION, 3, II, ENVIRONMENTALLY HAZARDOUS

*

15 Regulatory information

· **Safety, health and environmental regulations/legislation specific for the substance or mixture**
· **Sara**

· **Section 355 (extremely hazardous substances):**	
77-47-4	hexachlorocyclopentadiene
129-00-0	pyrene

· **Section 313 (Specific toxic chemical listings):**	
131-11-3	dimethyl phthalate
121-14-2	2,4-dinitrotoluene
606-20-2	2,6-dinitrotoluene
118-74-1	hexachlorobenzene
77-47-4	hexachlorocyclopentadiene
87-86-5	pentachlorophenol
120-12-7	anthracene
85-01-8	phenanthrene
53-70-3	dibenz[a,h]anthracene
193-39-5	indeno[1,2,3-cd]pyrene
218-01-9	chrysene
207-08-9	benzo[k]fluoranthene
205-99-2	benz[e]acephenanthrylene
50-32-8	benzo[a]pyrene
56-55-3	benz[a]anthracene
191-24-2	benzo[ghi]perylene
84-74-2	dibutyl phthalate

(Contd. on page 12)

Trade name: Semi-Volatile Standard

(Contd. of page 11)

117-81-7	di-(2-ethylhexyl) phthalate

· **TSCA (Toxic Substances Control Act):**	
67-64-1	acetone
78-59-1	3,5,5-trimethylcyclohex-2-enone
131-11-3	dimethyl phthalate
121-14-2	2,4-dinitrotoluene
606-20-2	2,6-dinitrotoluene
118-74-1	hexachlorobenzene
77-47-4	hexachlorocyclopentadiene
87-86-5	pentachlorophenol
129-00-0	pyrene
86-73-7	fluorene
120-12-7	anthracene
85-01-8	phenanthrene
208-96-8	acenaphthylene
53-70-3	dibenz[a,h]anthracene
193-39-5	indeno[1,2,3-cd]pyrene
218-01-9	chrysene
50-32-8	benzo[a]pyrene
56-55-3	benz[a]anthracene
84-74-2	dibutyl phthalate
117-81-7	di-(2-ethylhexyl) phthalate
85-68-7	BBP
103-23-1	Di-(2-ethylhexyl) adipate
84-66-2	diethyl phthalate

· **TSCA new (21st Century Act) (Substances not listed)**	
53-70-3	dibenz[a,h]anthracene

· **Proposition 65**

· **Chemicals known to cause cancer:**	
121-14-2	2,4-dinitrotoluene
606-20-2	2,6-dinitrotoluene
118-74-1	hexachlorobenzene
87-86-5	pentachlorophenol
53-70-3	dibenz[a,h]anthracene
193-39-5	indeno[1,2,3-cd]pyrene
218-01-9	chrysene
207-08-9	benzo[k]fluoranthene
205-99-2	benz[e]acephenanthrylene
50-32-8	benzo[a]pyrene
56-55-3	benz[a]anthracene
117-81-7	di-(2-ethylhexyl) phthalate

· **Chemicals known to cause reproductive toxicity for females:**	
84-74-2	dibutyl phthalate

(Contd. on page 13)

Agilent Technologies

Safety Data Sheet
acc. to OSHA HCS

Printing date 08/08/2018 Version Number 3 Reviewed on 08/08/2018

Trade name: Semi-Volatile Standard

(Contd. of page 12)

· **Chemicals known to cause reproductive toxicity for males:**	
121-14-2	2,4-dinitrotoluene
606-20-2	2,6-dinitrotoluene
84-74-2	dibutyl phthalate
117-81-7	di-(2-ethylhexyl) phthalate

· **Chemicals known to cause developmental toxicity:**	
118-74-1	hexachlorobenzene
84-74-2	dibutyl phthalate
117-81-7	di-(2-ethylhexyl) phthalate
85-68-7	BBP

· **Carcinogenic categories**

· **EPA (Environmental Protection Agency)**		
67-64-1	acetone	I
78-59-1	3,5,5-trimethylcyclohex-2-enone	C
131-11-3	dimethyl phthalate	D
118-74-1	hexachlorobenzene	B2
77-47-4	hexachlorocyclopentadiene	E, NL
87-86-5	pentachlorophenol	L
129-00-0	pyrene	D
86-73-7	fluorene	D
120-12-7	anthracene	D
85-01-8	phenanthrene	D
208-96-8	acenaphthylene	D
53-70-3	dibenz[a,h]anthracene	B2
193-39-5	indeno[1,2,3-cd]pyrene	B2
218-01-9	chrysene	B2
207-08-9	benzo[k]fluoranthene	B2
205-99-2	benz[e]acephenanthrylene	B2
50-32-8	benzo[a]pyrene	CaH
56-55-3	benz[a]anthracene	B2
191-24-2	benzo[ghi]perylene	D
84-74-2	dibutyl phthalate	D
117-81-7	di-(2-ethylhexyl) phthalate	B2
85-68-7	BBP	C
103-23-1	Di-(2-ethylhexyl) adipate	C
84-66-2	diethyl phthalate	D

· **TLV (Threshold Limit Value established by ACGIH)**		
67-64-1	acetone	A4
78-59-1	3,5,5-trimethylcyclohex-2-enone	A3
118-74-1	hexachlorobenzene	A3
77-47-4	hexachlorocyclopentadiene	A4
87-86-5	pentachlorophenol	A3

(Contd. on page 14)

Agilent Technologies

Safety Data Sheet
acc. to OSHA HCS

Printing date 08/08/2018 Version Number 3 Reviewed on 08/08/2018

Trade name: Semi-Volatile Standard

(Contd. of page 13)

218-01-9	chrysene	A3
205-99-2	benz[e]acephenanthrylene	A2
50-32-8	benzo[a]pyrene	A2
56-55-3	benz[a]anthracene	A2
117-81-7	di-(2-ethylhexyl) phthalate	A3
84-66-2	diethyl phthalate	A4

· **NIOSH-Ca (National Institute for Occupational Safety and Health)**	
121-14-2	2,4-dinitrotoluene
218-01-9	chrysene
50-32-8	benzo[a]pyrene
117-81-7	di-(2-ethylhexyl) phthalate

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

GHS02 GHS07 GHS08

· **Signal word** Danger

· **Hazard-determining components of labeling:**
acetone
dibenz[a,h]anthracene
benzo[a]pyrene
· **Hazard statements**
Highly flammable liquid and vapor.
Causes serious eye irritation.
May cause cancer.
May cause drowsiness or dizziness.
· **Precautionary statements**
Obtain special instructions before use.
Do not handle until all safety precautions have been read and understood.
Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
Ground/bond container and receiving equipment.
Use explosion-proof electrical/ventilating/lighting/equipment.
Use only non-sparking tools.
Take precautionary measures against static discharge.
Avoid breathing dust/fume/gas/mist/vapors/spray
Wash thoroughly after handling.
Use only outdoors or in a well-ventilated area.
Wear protective gloves/protective clothing/eye protection/face protection.
If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
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.
Call a poison center/doctor if you feel unwell.
If eye irritation persists: Get medical advice/attention.
In case of fire: Use for extinction: CO2, powder or water spray.
Store in a well-ventilated place. Keep container tightly closed.
Store in a well-ventilated place. Keep cool.

(Contd. on page 15)

Agilent Technologies

Safety Data Sheet
acc. to OSHA HCS

Trade name: Semi-Volatile Standard

(Contd. of page 14)

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

· **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** 08/08/2018 / 2
· **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
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
Flam. Liq. 2: Flammable liquids – Category 2
Eye Irrit. 2A: Serious eye damage/eye irritation – Category 2A
Carc. 1B: Carcinogenicity – Category 1B
STOT SE 3: Specific target organ toxicity (single exposure) – Category 3
· *** Data compared to the previous version altered.**