

according to WHS Regulations

Printing date 28.07.2021

Revision: 28.07.2021

Hazardous according to criteria of Australian Safety and Compensation Council.

1 Identification

- **Product identifier**
- **Trade name:** Semi-Volatile Cal STD, Method 8270C
- **Article number:** N9331030
- **Relevant identified uses of the substance or mixture and uses advised against**
No further relevant information available.
- **Application of the substance / the mixture** Laboratory chemicals
- **Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**

PerkinElmer, Inc.
710 Bridgeport Avenue
Shelton, Connecticut 06484 USA
CustomerCareUS@perkinelmer.com
203-925-4600

Supplier/Local:

PerkinElmer Australia
Lvl 2, Bldg 5, Brandon Office Park
530-540 Springvale Road
Glen Waverley
Melbourne
VIC 3150
Australia
1-800-033-391
ausales@perkinelmer.com

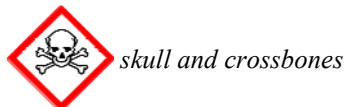
- **Emergency telephone number:**
CHEMTREC (within US) 800-424-9300
CHEMTREC (from outside US) +1 703-527-3887 (call collect)
CHEMTREC (within AU) +(61)-290372994

* 2 Hazard(s) Identification

- **Classification of the substance or mixture**



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



Acute Tox. 2 H310 Fatal in contact with skin.

(Contd. on page 2)

according to WHS Regulations

Printing date 28.07.2021

Revision: 28.07.2021

Trade name: Semi-Volatile Cal STD, Method 8270C

(Contd. of page 1)



health hazard

Muta. 1B H340 May cause genetic defects.

Carc. 1A H350 May cause cancer.

STOT RE 1 H372 Causes damage to organs through prolonged or repeated exposure.



Acute Tox. 4 H302 Harmful if swallowed.

Acute Tox. 4 H332 Harmful if inhaled.

Skin Irrit. 2 H315 Causes skin irritation.

Eye Irrit. 2A H319 Causes serious eye irritation.

· **Label elements**

· **GHS label elements** The product is classified and labelled according to the Globally Harmonised System (GHS).

· **Hazard pictograms** GHS02, GHS06, GHS08

· **Signal word** Danger

· **Hazard-determining components of labelling:**

dichloromethane

benzene

bis(2-chloroethyl) ether

acenaphthylene

· **Hazard statements**

H225 Highly flammable liquid and vapour.

H302 Harmful if swallowed.

H310 Fatal in contact with skin.

H332 Harmful if inhaled.

H315 Causes skin irritation.

H319 Causes serious eye irritation.

H340 May cause genetic defects.

H350 May cause cancer.

H372 Causes damage to organs through prolonged or repeated exposure.

· **Precautionary statements**

P210 Keep away from heat/sparks/open flames/hot surfaces. No smoking.

P303+P361+P353 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.

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.

P330 Rinse mouth.

P322 Specific measures (see on this label).

P403+P235 Store in a well-ventilated place. Keep cool.

P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

(Contd. on page 3)

according to WHS Regulations

Printing date 28.07.2021

Revision: 28.07.2021

Trade name: Semi-Volatile Cal STD, Method 8270C

(Contd. of page 2)

· **Other hazards**

The product does not contain any organic halogen compounds (AOX), nitrates, heavy metal compounds or formaldehydes.

· **Results of PBT and vPvB assessment**

· **PBT:**

87-68-3	hexachlorobuta-1,3-diene
120-12-7	anthracene
120-82-1	1,2,4-trichlorobenzene

· **vPvB:**



















87-68-3	hexachlorobuta-1,3-diene
---------	--------------------------

3 Composition and Information on Ingredients

· **Chemical characterisation: Mixtures**

· **Description:** Mixture of substances listed below with nonhazardous additions.

· **Dangerous components:**

75-09-2	dichloromethane  	45.25%
71-43-2	benzene    	45.15%
50-32-8	benzo[a]pyrene  	0.2%
53-70-3	dibenz[a,h]anthracene 	0.2%
56-55-3	benz[a]anthracene 	0.2%
67-72-1	hexachloroethane  	0.2%
77-47-4	hexachlorocyclopentadiene   	0.2%
78-59-1	3,5,5-trimethylcyclohex-2-enone  	0.2%
84-74-2	dibutyl phthalate 	0.2%

(Contd. on page 4)

according to WHS Regulations

Printing date 28.07.2021

Revision: 28.07.2021

Trade name: Semi-Volatile Cal STD, Method 8270C

		(Contd. of page 3)
85-01-8	phenanthrene, pure ⚠ Acute Tox. 4, H302; Skin Irrit. 2, H315	0.2%
85-68-7	BBP ⚠ Repr. 1B, H360	0.2%
86-30-6	nitrosodiphenylamine ⚠ Acute Tox. 3, H301	0.2%
87-68-3	hexachlorobuta-1,3-diene ⚠ Acute Tox. 3, H301; Acute Tox. 3, H311 Flam. Liq. 4, H227 PBT; vPvB	0.2%
88-74-4	o-nitroaniline ⚠ Acute Tox. 3, H301; Acute Tox. 3, H311; Acute Tox. 3, H331 ⚠ STOT RE 2, H373	0.2%
91-20-3	naphthalene ⚠ Carc. 2, H351 ⚠ Acute Tox. 4, H302 Flam. Liq. 4, H227	0.2%
98-95-3	nitrobenzene ⚠ Acute Tox. 3, H301; Acute Tox. 3, H311; Acute Tox. 3, H331 ⚠ Carc. 2, H351; Repr. 1B, H360; STOT RE 1, H372 Flam. Liq. 4, H227	0.2%
99-09-2	m-nitroaniline ⚠ Acute Tox. 3, H301; Acute Tox. 3, H311; Acute Tox. 3, H331 ⚠ STOT RE 2, H373	0.2%
100-01-6	p-nitroaniline ⚠ Acute Tox. 3, H301; Acute Tox. 3, H311; Acute Tox. 3, H331 ⚠ STOT RE 2, H373	0.2%
106-46-7	1,4-dichlorobenzene ⚠ Carc. 2, H351 ⚠ Acute Tox. 4, H302; Eye Irrit. 2, H319	0.2%
106-47-8	4-chloroaniline ⚠ Acute Tox. 3, H301; Acute Tox. 3, H311; Acute Tox. 3, H331 ⚠ Carc. 1B, H350 ⚠ Skin Sens. 1, H317	0.2%
108-60-1	bis(2-chloro-1-methylethyl) ether ⚠ Acute Tox. 3, H301	0.2%
111-44-4	bis(2-chloroethyl) ether ⚠ Flam. Liq. 3, H226 ⚠ Acute Tox. 2, H300; Acute Tox. 1, H310; Acute Tox. 2, H330 ⚠ Carc. 2, H351	0.2%
111-91-1	bis(2-chloroethoxy)methane ⚠ Acute Tox. 2, H300	0.2%
117-81-7	bis(2-ethylhexyl) phthalate ⚠ Repr. 1B, H360	0.2%

(Contd. on page 5)

AU

according to WHS Regulations

Printing date 28.07.2021

Revision: 28.07.2021

Trade name: Semi-Volatile Cal STD, Method 8270C

		(Contd. of page 4)
117-84-0	dioctyl phthalate ⚠ Repr. 2, H361	0.2%
118-74-1	hexachlorobenzene ⚠ Carc. 1B, H350; STOT RE 1, H372	0.2%
120-12-7	anthracene PBT	0.2%
120-82-1	1,2,4-trichlorobenzene ⚠ Acute Tox. 4, H302; Skin Irrit. 2, H315 PBT	0.2%
121-14-2	2,4-dinitrotoluene ⚠ Acute Tox. 3, H301; Acute Tox. 3, H311; Acute Tox. 3, H331 ⚠ Muta. 2, H341; Carc. 1B, H350; Repr. 2, H361; STOT RE 2, H373	0.2%
129-00-0	pyrene ⚠ Acute Tox. 3, H311; Acute Tox. 3, H331	0.2%
131-11-3	dimethyl phthalate ⚠ Acute Tox. 1, H310	0.2%
191-24-2	Benzo(g,h,i)perylene	0.2%
205-99-2	benz[e]acephenanthrylene ⚠ Carc. 1B, H350	0.2%
206-44-0	fluoranthene ⚠ Acute Tox. 4, H332	0.2%
207-08-9	benzo[k]fluoranthene ⚠ Carc. 1B, H350	0.2%
208-96-8	acenaphthylene ⚠ Acute Tox. 1, H310; Acute Tox. 1, H330	0.2%
606-20-2	2,6-dinitrotoluene ⚠ Acute Tox. 3, H301; Acute Tox. 3, H311; Acute Tox. 3, H331 ⚠ Muta. 2, H341; Carc. 1B, H350; Repr. 2, H361; STOT RE 2, H373	0.2%
621-64-7	nitrosodipropylamine ⚠ Carc. 1B, H350 ⚠ Acute Tox. 4, H302	0.2%
Additional Components		
83-32-9	acenaphthene	0.4%
86-73-7	fluorene	0.2%
91-57-6	2-methylnaphthalene ⚠ Acute Tox. 4, H302	0.2%
91-58-7	2-Chloronaphthalene	0.2%
95-50-1	1,2-dichlorobenzene ⚠ Acute Tox. 4, H302; Skin Irrit. 2, H315; Eye Irrit. 2, H319; STOT SE 3, H335 Flam. Liq. 4, H227	0.2%
100-51-6	Benzyl alcohol ⚠ Acute Tox. 4, H302; Acute Tox. 4, H312; Acute Tox. 4, H332	0.2%
101-55-3	4-Bromodiphenyl ether	0.2%
132-64-9	dibenzofuran	0.2%

(Contd. on page 6)

according to WHS Regulations

Printing date 28.07.2021

Revision: 28.07.2021

Trade name: Semi-Volatile Cal STD, Method 8270C

		(Contd. of page 5)
193-39-5	indeno[1,2,3-cd]pyrene	0.2%
541-73-1	1,3-dichlorobenzene ⚠ Acute Tox. 4, H302 Flam. Liq. 4, H227	0.2%
7005-72-3	4-CHLOROPHENYL PHENYL ETHER	0.2%
· SVHC		
50-32-8	benzo[a]pyrene	
56-55-3	benz[a]anthracene	
84-74-2	dibutyl phthalate	
85-01-8	phenanthrene, pure	
85-68-7	BBP	
98-95-3	nitrobenzene	
117-81-7	bis(2-ethylhexyl) phthalate	
120-12-7	anthracene	
121-14-2	2,4-dinitrotoluene	
129-00-0	pyrene	
191-24-2	Benzo(g,h,i)perylene	
206-44-0	fluoranthene	
207-08-9	benzo[k]fluoranthene	

· **Additional information:** For the wording of the listed hazard phrases refer to section 16.

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:**

Supply fresh air. If required, provide artificial respiration. Keep patient warm. Consult doctor if symptoms persist.

In case of unconsciousness place patient stably in side position for transportation.

· **After skin contact:**

If skin irritation continues, consult a doctor.

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:** Call for a doctor immediately.

· **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.

according to WHS Regulations

Printing date 28.07.2021

Revision: 28.07.2021

Trade name: Semi-Volatile Cal STD, Method 8270C

(Contd. of page 6)

* **5 Fire Fighting Measures**

- **Extinguishing media**
- **Suitable extinguishing agents:**
CO₂, 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**
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.
Wear protective equipment. Keep unprotected persons away.*
- **Environmental precautions:**
*Inform respective authorities in case of seepage into water course or sewage system.
Prevent seepage into sewage system, workpits and cellars.*
- **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.*

* **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 fire - and explosion protection:**
*Keep ignition sources away - Do not smoke.
Protect against electrostatic charges.
Keep respiratory protective device available.*
- **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 container tightly sealed.
Store in cool, dry conditions in well sealed receptacles.*

(Contd. on page 8)

according to WHS Regulations

Printing date 28.07.2021

Revision: 28.07.2021

Trade name: Semi-Volatile Cal STD, Method 8270C

· *Specific end use(s)* No further relevant information available.

(Contd. of page 7)

8 Exposure controls and personal protection

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

· *Control parameters*

· *Ingredients with limit values that require monitoring at the workplace:*

75-09-2 dichloromethane	
WES	Long-term value: 174 mg/m ³ , 50 ppm
	Sk
71-43-2 benzene	
WES	Long-term value: 3.2 mg/m ³ , 1 ppm
67-72-1 hexachloroethane	
WES	Long-term value: 9.7 mg/m ³ , 1 ppm
77-47-4 hexachlorocyclopentadiene	
WES	Long-term value: 0.11 mg/m ³ , 0.01 ppm
78-59-1 3,5,5-trimethylcyclohex-2-enone	
WES	Peak limitation: 28 mg/m ³ , 5 ppm
84-74-2 dibutyl phthalate	
WES	Long-term value: 5 mg/m ³
87-68-3 hexachlorobuta-1,3-diene	
WES	Long-term value: 0.21 mg/m ³ , 0.02 ppm
	Sk
91-20-3 naphthalene	
WES	Short-term value: 79 mg/m ³ , 15 ppm
	Long-term value: 52 mg/m ³ , 10 ppm
98-95-3 nitrobenzene	
WES	Long-term value: 5 mg/m ³ , 1 ppm
	Sk
100-01-6 p-nitroaniline	
WES	Long-term value: 3 mg/m ³
	Sk
106-46-7 1,4-dichlorobenzene	
WES	Short-term value: 300 mg/m ³ , 50 ppm
	Long-term value: 150 mg/m ³ , 25 ppm
111-44-4 bis(2-chloroethyl) ether	
WES	Short-term value: 58 mg/m ³ , 10 ppm
	Long-term value: 29 mg/m ³ , 5 ppm
	Sk

(Contd. on page 9)

according to WHS Regulations

Printing date 28.07.2021

Revision: 28.07.2021

Trade name: Semi-Volatile Cal STD, Method 8270C

(Contd. of page 8)

117-81-7 bis(2-ethylhexyl) phthalate	
WES	Short-term value: 10 mg/m ³ Long-term value: 5 mg/m ³
120-82-1 1,2,4-trichlorobenzene	
WES	Peak limitation: 37 mg/m ³ , 5 ppm
131-11-3 dimethyl phthalate	
WES	Long-term value: 5 mg/m ³

· **Additional information:** The lists valid during the making 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.

· **Respiratory protection:**

In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device.

· **Protection of hands:**



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

· **Material of gloves**

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

· **Penetration time of glove material**

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

· **Eye protection:**



Tightly sealed goggles

9 Physical and Chemical Properties

· **Information on basic physical and chemical properties**

· **General Information**

· **Appearance:**

Form: Liquid

(Contd. on page 10)

according to WHS Regulations

Printing date 28.07.2021

Revision: 28.07.2021

Trade name: Semi-Volatile Cal STD, Method 8270C

(Contd. of page 9)

· Colour:	Transparent
· Odour:	Characteristic
· Odour threshold:	Not determined.
· pH-value:	Not determined.
· Change in condition	
Melting point/freezing point:	-96.7 °C
Initial boiling point and boiling range:	40 °C
· Flash point:	-11 °C
· Flammability (solid, gas):	Not applicable.
· Ignition temperature:	555 °C
· Decomposition temperature:	Not determined.
· Auto-ignition temperature:	Product is not selfigniting.
· Explosive properties:	Product is not explosive. However, formation of explosive air/vapour mixtures are possible.
· Explosion limits:	
Lower:	1.2 Vol %
Upper:	22 Vol %
· Vapour pressure at 20 °C:	453 hPa
· Density at 20 °C:	1.271 g/cm ³
· Relative density	Not determined.
· Vapour density	Not determined.
· Evaporation rate	Not determined.
· Solubility in / Miscibility with water at 20 °C:	1.28 mg/L
· Partition coefficient: n-octanol/water:	Not determined.
· Viscosity:	
Dynamic:	Not determined.
Kinematic:	Not determined.
· Solvent content:	
Organic solvents:	91.4 %
Solids content:	4.8 %
· 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.

(Contd. on page 11)

according to WHS Regulations

Printing date 28.07.2021

Revision: 28.07.2021

Trade name: Semi-Volatile Cal STD, Method 8270C

(Contd. of page 10)

- **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 relevant for classification:

75-09-2 dichloromethane

Oral	LD50	1600 mg/kg (rat)
------	------	------------------

Inhalative	LC50/4 h	88 mg/l (rat)
------------	----------	---------------

71-43-2 benzene

Oral	LD50	4894 mg/kg (rat)
------	------	------------------

Dermal	LD50	48 mg/kg (mouse)
--------	------	------------------

Inhalative	LC50/4 h	9980 mg/l (mouse)
------------	----------	-------------------

77-47-4 hexachlorocyclopentadiene

Oral	LD50	1300 mg/kg (rat)
------	------	------------------

Dermal	LD50	430 mg/kg (rabbit)
--------	------	--------------------

85-68-7 BBP

Oral	LD50	2330 mg/kg (rat)
------	------	------------------

91-20-3 naphthalene

Oral	LD50	490 mg/kg (rat)
------	------	-----------------

Dermal	LD50	5000 mg/kg (rat)
--------	------	------------------

95-50-1 1,2-dichlorobenzene

Oral	LD50	500 mg/kg (rat)
------	------	-----------------

106-46-7 1,4-dichlorobenzene

Oral	LD50	500 mg/kg (rat)
------	------	-----------------

106-47-8 4-chloroaniline

Oral	LD50	310 mg/kg (rat)
------	------	-----------------

Dermal	LD50	3200 mg/kg (rat)
--------	------	------------------

111-44-4 bis(2-chloroethyl) ether

Oral	LD50	75 mg/kg (rat)
------	------	----------------

Dermal	LD50	90 mg/kg (rabbit)
--------	------	-------------------

Inhalative	LC50/4 h	0.33 mg/l (rat)
------------	----------	-----------------

120-82-1 1,2,4-trichlorobenzene

Oral	LD50	756 mg/kg (rat)
------	------	-----------------

121-14-2 2,4-dinitrotoluene

Oral	LD50	268 mg/kg (rat)
------	------	-----------------

606-20-2 2,6-dinitrotoluene

Oral	LD50	177 mg/kg (rat)
------	------	-----------------

(Contd. on page 12)

according to WHS Regulations

Printing date 28.07.2021

Revision: 28.07.2021

Trade name: Semi-Volatile Cal STD, Method 8270C

(Contd. of page 11)

- **Primary irritant effect:**
- **Skin corrosion/irritation** Irritant to skin and mucous membranes.
- **Serious eye damage/irritation** Irritating effect.
- **Respiratory or skin sensitisation** No sensitising effects known.
- **Additional toxicological information:**
The product shows the following dangers according to the calculation method of the General EU Classification Guidelines for Preparations as issued in the latest version:
Harmful
Irritant
The product can cause inheritable damage.
- **CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)**
Muta. 1B, Carc. 1A

* **12 Ecological Information**

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

87-68-3	hexachlorobuta-1,3-diene
120-12-7	anthracene
120-82-1	1,2,4-trichlorobenzene

· **vPvB:**

87-68-3	hexachlorobuta-1,3-diene
---------	--------------------------

- **Other adverse effects** No further relevant information available.

13 Disposal considerations

- **Waste treatment methods**
- **Recommendation**
Must not be disposed together with household garbage. Do not allow product to reach sewage system.
- **Uncleaned packaging:**
- **Recommendation:** Disposal must be made according to official regulations.

AU

(Contd. on page 13)

according to WHS Regulations




Printing date 28.07.2021

Revision: 28.07.2021

Trade name: Semi-Volatile Cal STD, Method 8270C

(Contd. of page 12)

14 Transport information

<ul style="list-style-type: none"> · UN-Number · ADG, IMDG, IATA 	<p>UN1992</p>
<ul style="list-style-type: none"> · UN proper shipping name · ADG · IMDG · IATA 	<p>1992 FLAMMABLE LIQUID, TOXIC, N.O.S. (BENZENE, DICHLOROMETHANE), ENVIRONMENTALLY HAZARDOUS</p> <p>FLAMMABLE LIQUID, TOXIC, N.O.S. (BENZENE, DICHLOROMETHANE), MARINE POLLUTANT</p> <p>FLAMMABLE LIQUID, TOXIC, N.O.S. (BENZENE, DICHLOROMETHANE)</p>
<ul style="list-style-type: none"> · Transport hazard class(es) · ADG 	
<ul style="list-style-type: none"> · Class · Label 	<p>3 (FT1) Flammable liquids.</p> <p>3+6.1</p>
<ul style="list-style-type: none"> · IMDG 	
<ul style="list-style-type: none"> · Class · Label 	<p>3 Flammable liquids.</p> <p>3/6.1</p>
<ul style="list-style-type: none"> · IATA 	
<ul style="list-style-type: none"> · Class · Label 	<p>3 Flammable liquids.</p> <p>3 (6.1)</p>
<ul style="list-style-type: none"> · Packing group · ADG, IMDG, IATA 	<p>II</p>
<ul style="list-style-type: none"> · Environmental hazards: · Marine pollutant: · Special marking (ADG): 	<p>Product contains environmentally hazardous substances: 1,2,4-trichlorobenzene, benz[a]anthracene</p> <p>Yes</p> <p>Symbol (fish and tree)</p> <p>Symbol (fish and tree)</p>
<ul style="list-style-type: none"> · Special precautions for user · Hazard identification number (Kemler code): · EMS Number: 	<p>Warning: Flammable liquids.</p> <p>336</p> <p>F-E,S-D</p>

(Contd. on page 14)

according to WHS Regulations

Printing date 28.07.2021

Revision: 28.07.2021

Trade name: Semi-Volatile Cal STD, Method 8270C

(Contd. of page 13)

· Segregation groups	Liquid halogenated hydrocarbons
· Stowage Category	B
· Stowage Code	SW2 Clear of living quarters.
· Transport in bulk according to Annex II of Marpol and the IBC Code	Not applicable.
· Transport/Additional information:	
· ADG	
· 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
· Transport category	2
· Tunnel restriction code	D/E
· 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 1992 FLAMMABLE LIQUID, TOXIC, N.O.S. (BENZENE, DICHLOROMETHANE), 3 (6.1), II, ENVIRONMENTALLY HAZARDOUS

15 Regulatory information

· Safety, health and environmental regulations/legislation specific for the substance or mixture		
75-09-2	dichloromethane ☠ Carc. 2, H351 ☠ Acute Tox. 4, H302	45.25%
71-43-2	benzene ☠ Flam. Liq. 2, H225 ☠ Acute Tox. 1, H310 ☠ Muta. 1B, H340; Carc. 1A, H350; STOT RE 1, H372; Asp. Tox. 1, H304 ☠ Skin Irrit. 2, H315; Eye Irrit. 2, H319	45.15%
83-32-9	acenaphthene	0.4%
· Australia: Priority Existing Chemicals		
71-43-2	benzene	
84-74-2	dibutyl phthalate	
85-68-7	BBP	
106-46-7	1,4-dichlorobenzene	
117-81-7	bis(2-ethylhexyl) phthalate	
117-84-0	dioctyl phthalate	
131-11-3	dimethyl phthalate	

(Contd. on page 15)

according to WHS Regulations

Printing date 28.07.2021

Revision: 28.07.2021

Trade name: Semi-Volatile Cal STD, Method 8270C

(Contd. of page 14)

- **Directive 2012/18/EU**
- **Named dangerous substances - ANNEX I** None of the ingredients is listed.
- **Seveso category**
H2 ACUTE TOXIC
E1 Hazardous to the Aquatic Environment
P5c FLAMMABLE LIQUIDS
- **Qualifying quantity (tonnes) for the application of lower-tier requirements** 50 t
- **Qualifying quantity (tonnes) for the application of upper-tier requirements** 200 t
- **National regulations:**
- **Additional classification according to Decree on Hazardous Materials, Annex II:**
Carcinogenic hazardous material group III (dangerous).
- **Information about limitation of use:**
Workers are not allowed to be exposed to this hazardous material. Exceptions can be made by the authorities in certain cases.
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.
- **Waterhazard class:** Water hazard class 3 (Self-assessment): extremely hazardous for water.

- **Other regulations, limitations and prohibitive regulations**

- **Substances of very high concern (SVHC) according to REACH, Article 57**

50-32-8	benzo[a]pyrene
56-55-3	benz[a]anthracene
84-74-2	dibutyl phthalate
85-01-8	phenanthrene, pure
85-68-7	BBP
98-95-3	nitrobenzene
117-81-7	bis(2-ethylhexyl) phthalate
120-12-7	anthracene
121-14-2	2,4-dinitrotoluene
129-00-0	pyrene
191-24-2	Benzo(g,h,i)perylene
206-44-0	fluoranthene
207-08-9	benzo[k]fluoranthene

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

16 Other information

Disclaimer

The information provided in this Material Safety Data Sheet is based on our present knowledge, and believed to be correct at the date of publication. However, no representation is made concerning its accuracy and completeness. It is intended as guidance only, and is not to be considered a warranty or quality specification. All materials may present unknown hazards, and should be used with caution. Although certain hazards are described, we cannot guarantee that these are the only hazards which exist. PerkinElmer Life and Analytical Sciences shall not be held liable for any damage resulting from handling or from contact with the product.

(Contd. on page 16)

according to WHS Regulations

Printing date 28.07.2021

Revision: 28.07.2021

Trade name: Semi-Volatile Cal STD, Method 8270C

(Contd. of page 15)

· **Relevant phrases**

- H225 Highly flammable liquid and vapour.*
- H226 Flammable liquid and vapour.*
- H227 Combustible liquid.*
- H300 Fatal if swallowed.*
- H301 Toxic if swallowed.*
- H302 Harmful if swallowed.*
- H304 May be fatal if swallowed and enters airways.*
- H310 Fatal in contact with skin.*
- H311 Toxic in contact with skin.*
- H312 Harmful in contact with skin.*
- H314 Causes severe skin burns and eye damage.*
- H315 Causes skin irritation.*
- H317 May cause an allergic skin reaction.*
- H319 Causes serious eye irritation.*
- H330 Fatal if inhaled.*
- H331 Toxic if inhaled.*
- H332 Harmful if inhaled.*
- H335 May cause respiratory irritation.*
- H340 May cause genetic defects.*
- H341 Suspected of causing genetic defects.*
- H350 May cause cancer.*
- H351 Suspected of causing cancer.*
- H360 May damage fertility or the unborn child.*
- H361 Suspected of damaging fertility or the unborn child.*
- H372 Causes damage to organs through prolonged or repeated exposure.*
- H373 May cause damage to organs through prolonged or repeated exposure.*

· **Department issuing SDS: Environmental, Health and Safety**

· **Contact:**

- Within the USA: 1-(800)-762-4000*
- Outside the USA: 1-(203)-712-8488*

· **Abbreviations and acronyms**

- RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)*
- ICAO: International Civil Aviation Organisation*
- 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*
- IATA: International Air Transport Association*
- 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)*
- LC50: Lethal concentration, 50 percent*
- LD50: Lethal dose, 50 percent*
- PBT: Persistent, Bioaccumulative and Toxic*
- SVHC: Substances of Very High Concern*
- vPvB: very Persistent and very Bioaccumulative*
- Flam. Liq. 2: Flammable liquids – Category 2*
- Flam. Liq. 3: Flammable liquids – Category 3*
- Flam. Liq. 4: Flammable liquids – Category 4*
- Acute Tox. 3: Acute toxicity – Category 3*
- Acute Tox. 4: Acute toxicity – Category 4*
- Acute Tox. 1: Acute toxicity – Category 1*
- Acute Tox. 2: Acute toxicity – Category 2*

(Contd. on page 17)

according to WHS Regulations

Printing date 28.07.2021

Revision: 28.07.2021

Trade name: Semi-Volatile Cal STD, Method 8270C

(Contd. of page 16)

Skin Corr. 1: Skin corrosion/irritation – Category 1
Skin Irrit. 2: Skin corrosion/irritation – Category 2
Eye Irrit. 2: Serious eye damage/eye irritation – Category 2
Eye Irrit. 2A: Serious eye damage/eye irritation – Category 2A
Skin Sens. 1: Skin sensitisation – Category 1
Muta. 1B: Germ cell mutagenicity – Category 1B
Muta. 2: Germ cell mutagenicity – Category 2
Carc. 1A: Carcinogenicity – Category 1A
Carc. 1B: Carcinogenicity – Category 1B
Carc. 2: Carcinogenicity – Category 2
Repr. 1B: Reproductive toxicity – Category 1B
Repr. 2: Reproductive toxicity – Category 2
STOT SE 3: Specific target organ toxicity (single exposure) – Category 3
STOT RE 1: Specific target organ toxicity (repeated exposure) – Category 1
STOT RE 2: Specific target organ toxicity (repeated exposure) – Category 2
Asp. Tox. 1: Aspiration hazard – Category 1

· *** Data compared to the previous version altered.**

AU