

Safety Data Sheet

acc. to OSHA HCS

Printing date 07/14/2015

Reviewed on 01/19/2015

1 Identification

- **Product identifier**
- **Trade name:** SR-97
- **Article number:** SR-97
- **Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**
Chemical Consultants Inc.
1850 Wild Turkey Circle
Corona, CA 92880
USA
+1 (951) 735-5511
ncollins@ccidom.com
- **Information department:** Product safety department
- **Emergency telephone number:** INFOTRAC 1-800-535-5053

2 Hazard(s) identification

- **Classification of the substance or mixture**



GHS08 Health hazard

Carc. 1A H350 May cause cancer.



GHS07

Acute Tox. 4 H302 Harmful if swallowed.
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 labeled according to the Globally Harmonized System (GHS).
- **Hazard pictograms**



GHS07 GHS08

- **Signal word** Danger
- **Hazard-determining components of labeling:**
dichloromethane
tetrachloroethylene
- **Hazard statements**
Harmful if swallowed.
Causes skin irritation.
Causes serious eye irritation.
May cause cancer.
- **Precautionary statements**
Wear protective gloves.
Wear eye protection / face protection.
Wash thoroughly after handling.

(Contd. on page 2)

Safety Data Sheet

acc. to OSHA HCS

Printing date 07/14/2015

Reviewed on 01/19/2015

Trade name: SR-97

(Contd. of page 1)

Do not eat, drink or smoke when using this product.
 Obtain special instructions before use.
 Do not handle until all safety precautions have been read and understood.
 If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
 Specific treatment (see on this label).
 If swallowed: Call a poison center/doctor if you feel unwell.
 IF exposed or concerned: Get medical advice/attention.
 If skin irritation occurs: Get medical advice/attention.
 If eye irritation persists: Get medical advice/attention.
 Rinse mouth.
 If on skin: Wash with plenty of water.
 Take off contaminated clothing and wash it before reuse.
 Store locked up.
 Dispose of contents/container in accordance with local/regional/national/international regulations.

- **Classification system:**

- **NFPA ratings (scale 0 - 4)**



- **HMIS-ratings (scale 0 - 4)**



- **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	70-90%
127-18-4	tetrachloroethylene	10-20%

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.

- **After swallowing:** If symptoms persist consult doctor.

- **Information for doctor:**

- **Most important symptoms and effects, both acute and delayed** No further relevant information available.

(Contd. on page 3)

Safety Data Sheet acc. to OSHA HCS

Printing date 07/14/2015

Reviewed on 01/19/2015

Trade name: SR-97

(Contd. of page 2)

- **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.
- **Special hazards arising from the substance or mixture** No further relevant information available.
- **Advice for firefighters**
- **Protective equipment:** Wear self-contained respiratory protective device.

6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures**
Ensure adequate ventilation
Wear protective equipment. Keep unprotected persons away.
Mount respiratory protective device.
- **Environmental precautions:** Prevent from spreading (e.g. by damming-in or oil barriers).
- **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**
Store in cool, dry place in tightly closed receptacles.
Ensure good ventilation/exhaustion at the workplace.
Prevent formation of aerosols.
- **Information about protection against explosions and fires:** No special measures required.
- **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.

(Contd. on page 4)

Safety Data Sheet

acc. to OSHA HCS

Printing date 07/14/2015

Reviewed on 01/19/2015

Trade name: SR-97

(Contd. of page 3)

· Control parameters

· Components with limit values that require monitoring at the workplace:

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

127-18-4 tetrachloroethylene

PEL Long-term value: 100 ppm
Ceiling limit value: 200; 300* ppm
*5-min peak in any 3 hrs

REL Minimize workplace exp. concs.; Pocket Guide App. A

TLV Short-term value: 685 mg/m³, 100 ppm
Long-term value: 170 mg/m³, 25 ppm
BEI

Chemical identity	Type	Exposure Limit values	Source
Methylene Chloride	TWA	50 ppm	US. ACGIH Threshold Limit Values (03 2013)
	STEL	125 ppm	US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050) (03 2012)
	OSHA_A CT	12.5 ppm	US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050) (03 2012)
	TWA	25 ppm	US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050) (03 2012)
	ST ESL	3,600 µg/m ³	US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality) (02 2013)
	AN ESL	350 µg/m ³	US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality) (02 2013)
	ST ESL	1,100 ppb	US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality) (02 2013)
	AN ESL	100 ppb	US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality) (02 2013)
	TWA PEL	25 ppm 87 mg/m ³	US. California Code of Regulations, Title 8, Section 5155. Airborne Contaminants (02 2012)
	STEL	125 ppm 435 mg/m ³	US. California Code of Regulations, Title 8, Section 5155. Airborne Contaminants (02 2012)
	TWA A LV	12.5 ppm	US. California Code of Regulations, Title 8, Section 5155. Airborne Contaminants (02 2012)

(Contd. on page 5)

Safety Data Sheet

acc. to OSHA HCS

Printing date 07/14/2015

Reviewed on 01/19/2015

Trade name: SR-97

Tetrachloroethylene	TWA	25 ppm	US. ACGIH Threshold Limit Values (03 2013)
	STEL	100 ppm	US. ACGIH Threshold Limit Values (03 2013)
	TWA	25 ppm 170 mg/m3	US. OSHA Table Z-1-A (29 CFR 1910.1000) (1989)
	TWA	100 ppm	US. OSHA Table Z-2 (29 CFR 1910.1000) (02 2006)
	Ceiling	200 ppm	US. OSHA Table Z-2 (29 CFR 1910.1000) (02 2006)
	MAX. CONC	300 ppm	US. OSHA Table Z-2 (29 CFR 1910.1000) (02 2006)
	TWA	25 ppm 170 mg/m3	US. Tennessee. OELs. Occupational Exposure Limits, Table Z1A (06 2008)
	AN ESL	26 µg/m3	US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality) (02 2013)
	ST ESL	2,000 µg/m3	US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality) (02 2013)
	ST ESL	300 ppb	US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality) (02 2013)
	AN ESL	3.8 ppb	US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality) (02 2013)
	Ceiling	300 ppm	US. California Code of Regulations, Title 8, Section 5155. Airborne Contaminants (02 2012)
	TWA PEL	25 ppm 170 mg/m3	US. California Code of Regulations, Title 8, Section 5155. Airborne Contaminants (02 2012)
	STEL	100 ppm 685 mg/m3	US. California Code of Regulations, Title 8, Section 5155. Airborne Contaminants (02 2012)

(Contd. of page 4)

· Ingredients with biological limit values:

75-09-2 dichloromethane

BEI 0.3 mg/L
 Medium: urine
 Time: end of shift
 Parameter: Dichloromethane (semi-quantitative)

127-18-4 tetrachloroethylene

BEI 3 ppm
 Medium: end-exhaled air
 Time: prior to shift
 Parameter: Tetrachloroethylene

0.5 mg/L
 Medium: blood
 Time: prior to shift
 Parameter: Tetrachloroethylene

· **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.
 Wash hands before breaks and at the end of work.

· **Breathing equipment:**

In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use respiratory protective device that is independent of circulating air.

· **Protection of hands:**



Protective gloves

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

(Contd. on page 6)

Safety Data Sheet

acc. to OSHA HCS

Printing date 07/14/2015

Reviewed on 01/19/2015

Trade name: SR-97

(Contd. of page 5)

Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

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:** Safety glasses

9 Physical and chemical properties

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

- **General Information**

- **Appearance:**

Form:	Fluid
Color:	According to product specification
Odor:	Characteristic
Odour threshold:	Not determined.

- **pH-value:** Not determined.

- **Change in condition**

Melting point/Melting range:	Undetermined.
Boiling point/Boiling range:	40 °C (104 °F)

- **Flash point:** Not applicable.

- **Flammability (solid, gaseous):** Not applicable.

- **Ignition temperature:** 605 °C (1121 °F)

- **Decomposition temperature:** Not determined.

- **Auto igniting:** Product is not selfigniting.

- **Danger of explosion:** Product does not present an explosion hazard.

- **Explosion limits:**

Lower:	13.0 Vol %
Upper:	22.0 Vol %

- **Vapor pressure at 20 °C (68 °F):** 453 hPa (340 mm Hg)

- **Density at 20 °C (68 °F):** 1.37144 g/cm³ (11.445 lbs/gal)

- **Relative density** Not determined.

- **Vapour 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.

- **Viscosity:**

Dynamic:	Not determined.
Kinematic:	Not determined.

(Contd. on page 7)

Safety Data Sheet

acc. to OSHA HCS

Printing date 07/14/2015

Reviewed on 01/19/2015

Trade name: SR-97

(Contd. of page 6)

- **Solvent content:**
- **Organic solvents:** 100.0 %
- **Other information** No further relevant information available.

10 Stability and reactivity

- **Reactivity**
- **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:**

75-09-2 dichloromethane

Oral	LD50	1600 mg/kg (rat)
Inhalative	LC50/4 h	88 mg/l (rat)

127-18-4 tetrachloroethylene

Oral	LD50	2629 mg/kg (rat)
------	------	------------------

- **Primary irritant effect:**
- **on the skin:** No irritant effect.
- **on the eye:** No irritating effect.
- **Sensitization:** No sensitizing effects known.
- **Additional toxicological information:**
The product shows the following dangers according to internally approved calculation methods for preparations:

- **Carcinogenic categories**

- **IARC (International Agency for Research on Cancer)**

75-09-2	dichloromethane	2B
127-18-4	tetrachloroethylene	2A

- **NTP (National Toxicology Program)**

75-09-2	dichloromethane	R
127-18-4	tetrachloroethylene	R

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

75-09-2	dichloromethane
---------	-----------------

12 Ecological information

- **Toxicity**
- **Aquatic toxicity:** No further relevant information available.
- **Persistence and degradability** No further relevant information available.

(Contd. on page 8)

Safety Data Sheet

acc. to OSHA HCS

Printing date 07/14/2015

Reviewed on 01/19/2015

Trade name: SR-97

(Contd. of page 7)

- **Behavior in environmental systems:**
- **Bioaccumulative potential** No further relevant information available.
- **Mobility in soil** No further relevant information available.
- **Ecotoxicological effects:**
- **Remark:** Harmful to fish
- **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.
Harmful to aquatic organisms
- **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:**
Dispose of content and/or container in accordance with local, regional, national and/or international regulations.
- **Uncleaned packagings:**
- **Recommendation:**
Dispose of content and/or container in accordance with local, regional, national and/or international regulations

14 Transport information

- | | |
|--|---|
| <ul style="list-style-type: none"> · UN-Number · DOT, IMDG, IATA · ADN | <p style="margin-left: 20px;">UN2810
not regulated</p> |
| <ul style="list-style-type: none"> · UN proper shipping name · DOT · ADN · IMDG · IATA | <p style="margin-left: 20px;">Toxic, liquids, organic, n.o.s. (Dicloromethane, Tetrachloroethylene)
MARINE POLLUTANT
not regulated
TOXIC LIQUID, ORGANIC, N.O.S. (DICLOROMETHANE,
TETRACHLOROETHYLENE), MARINE POLLUTANT
Toxic, liquids, organic, n.o.s. (Dicloromethane, Tetrachloroethylene)
MARINE POLLUTANT</p> |
| <ul style="list-style-type: none"> · Transport hazard class(es) · DOT | <p style="margin-left: 20px;">6.1 Toxic substances</p> |
| <ul style="list-style-type: none"> · Class · Label · ADN/R Class: | <p style="margin-left: 20px;">6.1
not regulated</p> |



(Contd. on page 9)

US

Safety Data Sheet

acc. to OSHA HCS

Printing date 07/14/2015

Reviewed on 01/19/2015

Trade name: SR-97

(Contd. of page 8)

· **IMDG**

· Class	6.1 Toxic substances
· Label	6.1
· Packing group	III
· DOT, IMDG	III
· IATA	III
· Environmental hazards:	
· Marine pollutant:	Yes Symbol (fish and tree)
· Special precautions for user	Not applicable.
· EMS Number:	F-A,S-A
· Segregation groups	Liquid halogenated hydrocarbons
· 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: No limit On cargo aircraft only: No limit
· Remarks:	Special marking with the symbol (fish and tree).
· 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 "Model Regulation":	UN2810, Toxic, liquids, organic, n.o.s.(Dicloromethane, Tetrachloroethylene), 6.1, PG III, MARINE POLLUTANT

15 Regulatory information

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

· Section 355 (extremely hazardous substances):
--

None of the ingredients is listed.

· Section 313 (Specific toxic chemical listings):
--

All ingredients are listed.

· TSCA (Toxic Substances Control Act):

All ingredients are listed.

· Proposition 65

· Chemicals known to cause cancer:

This product contains a chemical known to the state of California to cause cancer

All ingredients are listed.

(Contd. on page 10)

Safety Data Sheet

acc. to OSHA HCS

Printing date 07/14/2015

Reviewed on 01/19/2015

Trade name: SR-97

(Contd. of page 9)

· **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**

· **EPA (Environmental Protection Agency)**

75-09-2	dichloromethane	L
127-18-4	tetrachloroethylene	L

· **TLV (Threshold Limit Value established by ACGIH)**

75-09-2	dichloromethane	A3
127-18-4	tetrachloroethylene	A3

· **NIOSH-Ca (National Institute for Occupational Safety and Health)**

All ingredients are listed.

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

· **Hazard pictograms**



GHS07 GHS08

· **Signal word** Danger

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

dichloromethane
tetrachloroethylene

· **Hazard statements**

Harmful if swallowed.
Causes skin irritation.
Causes serious eye irritation.
May cause cancer.

· **Precautionary statements**

Wear protective gloves.
Wear eye protection / face protection.
Wash thoroughly after handling.
Do not eat, drink or smoke when using this product.
Obtain special instructions before use.
Do not handle until all safety precautions have been read and understood.
If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
Specific treatment (see on this label).
If swallowed: Call a poison center/doctor if you feel unwell.
IF exposed or concerned: Get medical advice/attention.
If skin irritation occurs: Get medical advice/attention.
If eye irritation persists: Get medical advice/attention.
Rinse mouth.
If on skin: Wash with plenty of water.
Take off contaminated clothing and wash it before reuse.

(Contd. on page 11)

Safety Data Sheet

acc. to OSHA HCS

Printing date 07/14/2015

Reviewed on 01/19/2015

Trade name: SR-97

(Contd. of page 10)

Store locked up.

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

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

16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

· **Department issuing SDS:** Environment protection department.

· **Contact:** Mr. Collins

· **Date of preparation / last revision** 07/14/2015 / -

· **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)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

Acute Tox. 4: Acute toxicity, Hazard Category 4

Skin Irrit. 2: Skin corrosion/irritation, Hazard Category 2

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

Carc. 1A: Carcinogenicity, Hazard Category 1A