

SAFETY DATA SHEET

1. Identification

Product identifier	Semi-Volatiles Mixture #6 - 8250A	
Other means of identification	M-SV82506X4	
Item		
Recommended use	For Laboratory Use Only	
Recommended restrictions	None known.	
Manufacturer/Importer/Supplier/I	Distributor information	
Manufacturer		
Company name	Chem Service, Inc.	
Address	660 Tower Lane	
	West Chester, PA 19380	
	United States	
Telephone	Toll Free	800-452-9994
-	Direct	610-692-3026
Website	www.chemservice.com	
E-mail	info@chemservice.com	
Emergency phone number	Chemtrec US	800-424-9300
	Chemtrec outside US	+1 703-527-3887

2. Hazard(s) identification

Physical hazards	Not classified.	
Health hazards	Acute toxicity, oral	Category 4
	Acute toxicity, dermal	Category 4
	Skin corrosion/irritation	Category 2
	Serious eye damage/eye irritation	Category 2A
	Carcinogenicity	Category 1A
	Reproductive toxicity (fertility)	Category 2
	Specific target organ toxicity, repeated exposure	Category 2
Environmental hazards	Hazardous to the aquatic environment, acute hazard	Category 3
	Hazardous to the aquatic environment, long-term hazard	Category 3
OSHA defined hazards	Not classified.	

Label elements

Signal word

Hazard statement

Response

Precautionary statement Prevention



Harmful if swallowed. Harmful in contact with skin. Causes skin irritation. Causes serious eye irritation. May cause cancer. Suspected of damaging fertility. May cause damage to organs through prolonged or repeated exposure. Harmful to aquatic life. Harmful to aquatic life with long lasting effects.

Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not breathe mist or vapor. Wash thoroughly after handling. Do not eat, drink or smoke when using this product. Avoid release to the environment. Wear protective gloves/protective clothing/eye protection/face protection.

If swallowed: Call a poison center/doctor if you feel unwell. If on skin: Wash with plenty of water. 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. Specific treatment (see this label). Rinse mouth. If skin irritation occurs: Get medical advice/attention. Take off contaminated clothing and wash before reuse.

Storage Disposal Hazard(s) not otherwise classified (HNOC) Supplemental information

Store locked up.

Dispose of contents/container in accordance with local/regional/national/international regulations. None known.

0.6% of the mixture consists of component(s) of unknown acute oral toxicity. 1.2% of the mixture consists of component(s) of unknown acute dermal toxicity. 98% of the mixture consists of component(s) of unknown acute hazards to the aquatic environment. 97.9% of the mixture consists of component(s) of unknown long-term hazards to the aquatic environment.

3. Composition/information on ingredients

Mixtures

Chemical name	Common name and synonyms	CAS number	%
Methylene chloride	DICHLOROMETHANE; METHYLENE DICHLORIDE	75-09-2	90 - 100
1,2,4,5-Tetrachlorobenzene		95-94-3	0.1
1-Chloronaphthalene		90-13-1	0.1
2,3,4,6-Tetrachlorophenol		58-90-2	0.1
2,4,5-Trichlorophenol		95-95-4	0.1
2,4,6-Trichlorophenol		88-06-2	0.1
2,4-Dinitrophenol (min 15wt% water)		51-28-5	0.1
2,4-Dinitrotoluene		121-14-2	0.1
2,6-Dinitrotoluene		606-20-2	0.1
2-Chloronaphthalene		91-58-7	0.1
4-Chlorophenyl phenyl ether		7005-72-3	0.1
4-Nitrophenol		100-02-7	0.1
Acenaphthene		83-32-9	0.1
Acenaphthylene		208-96-8	0.1
a-Naphthylamine		134-32-7	0.1
b-Naphthylamine		91-59-8	0.1
Dibenzofuran		132-64-9	0.1
Diethyl phthalate		84-66-2	0.1
Dimethyl phthalate		131-11-3	0.1
Fluorene		86-73-7	0.1
m-Nitroaniline		99-09-2	0.1
o-Nitroaniline		88-74-4	0.1
Pentachlorobenzene		608-93-5	0.1
p-Nitroaniline		100-01-6	0.1

*Designates that a specific chemical identity and/or percentage of composition has been withheld as a trade secret.

4. First-aid measures

Inhalation	Move to fresh air. Call a physician if symptoms develop or persist.
Skin contact	Wash with plenty of soap and water. Call a POISON CENTER or doctor/physician if you feel unwell. If skin irritation occurs: Get medical advice/attention. Take off contaminated clothing and wash before reuse.
Eye contact	Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention if irritation develops and persists.
Ingestion	Rinse mouth. IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.
Most important symptoms/effects, acute and delayed	Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Skin irritation. May cause redness and pain. Prolonged exposure may cause chronic effects.
Indication of immediate medical attention and special treatment needed	Provide general supportive measures and treat symptomatically. In case of shortness of breath, give oxygen. Keep victim warm. Keep victim under observation. Symptoms may be delayed.

IF exposed or concerned: Get medical advice/attention. Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Wash contaminated clothing before reuse.

5. Fire-fighting measures

Suitable extinguishing media	Water fog. Foam. Dry chemical powder. Carbon dioxide (CO2).
Unsuitable extinguishing media	Do not use water jet as an extinguisher, as this will spread the fire.
Specific hazards arising from the chemical	During fire, gases hazardous to health may be formed.
Special protective equipment and precautions for firefighters	Self-contained breathing apparatus and full protective clothing must be worn in case of fire.
Fire-fighting equipment/instructions	Move containers from fire area if you can do so without risk.
Specific methods	Use standard firefighting procedures and consider the hazards of other involved materials.
General fire hazards	No unusual fire or explosion hazards noted.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures	Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Keep out of low areas. Wear appropriate protective equipment and clothing during clean-up. Do not breathe mist or vapor. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ensure adequate ventilation. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS.
Methods and materials for containment and cleaning up	Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Cover with plastic sheet to prevent spreading. Absorb in vermiculite, dry sand or earth and place into containers. Prevent entry into waterways, sewer, basements or confined areas. Following product recovery, flush area with water.
	Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.
Environmental precautions	Never return spills to original containers for re-use. For waste disposal, see section 13 of the SDS. Avoid release to the environment. Contact local authorities in case of spillage to drain/aquatic environment. Prevent further leakage or spillage if safe to do so. Do not contaminate water. Avoid discharge into drains, water courses or onto the ground.
7. Handling and storage	
Precautions for safe handling	Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not breathe mist or vapor. Do not taste or swallow. Avoid contact with skin. Avoid contact with eyes. Avoid contact during pregnancy/while nursing. Avoid prolonged exposure. Avoid contact with clothing. Provide adequate ventilation. Wear appropriate personal protective

Conditions for safe storage, including any incompatibilities Store locked up. Store in original tightly closed container. Refrigeration recommended. Store away from incompatible materials (see Section 10 of the SDS).

the environment. Do not empty into drains.

equipment. Observe good industrial hygiene practices. When using, do not eat, drink or smoke. Wash hands thoroughly after handling. Wash contaminated clothing before reuse. Avoid release to

8. Exposure controls/personal protection

Occupational exposure limits

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Components	Туре	Value	
Methylene chloride (CAS 75-09-2)	STEL	125 ppm	
	TWA	25 ppm	
US. OSHA Table Z-1 Limits for A	ir Contaminants (29 CFR 1910.	1000)	
Components	Туре	Value	
2,4-Dinitrotoluene (CAS 121-14-2)	PEL	1.5 mg/m3	
2,6-Dinitrotoluene (CAS 606-20-2)	PEL	1.5 mg/m3	
4-Chlorophenyl phenyl ether (CAS 7005-72-3)	PEL	0.5 mg/m3	
Dimethyl phthalate (CAS 131-11-3)	PEL	5 mg/m3	
p-Nitroaniline (CAS 100-01-6)	PEL	6 mg/m3	
<i>.</i>		1 ppm	

Components	Туре		Va	alue
2,4-Dinitrotoluene (CAS	TWA		0.	2 mg/m3
121-14-2) 2,6-Dinitrotoluene (CAS	TWA		0.	2 mg/m3
606-20-2) Diethyl phthalate (CAS	TWA		5	mg/m3
84-66-2) Dimethyl phthalate (CAS	TWA		5	mg/m3
131-11-3) Methylene chloride (CAS	TWA		50) ppm
75-09-2) p-Nitroaniline (CAS 100-01-6)	TWA		3	mg/m3
US. NIOSH: Pocket Guide	to Chemical Hazards			
Components	Туре		Va	alue
2,4-Dinitrotoluene (CAS	TWA		1.	5 mg/m3
121-14-2) 2,6-Dinitrotoluene (CAS	TWA		1.	5 mg/m3
606-20-2) 4-Chlorophenyl phenyl	TWA		0.	5 mg/m3
ether (CAS 7005-72-3) Diethyl phthalate (CAS	TWA		5	mg/m3
84-66-2) Dimethyl phthalate (CAS 131-11-3)	TWA		5	mg/m3
p-Nitroaniline (CAS 100-01-6)	TWA		3	mg/m3
blogical limit values				
ACGIH Biological Exposu	ire Indices			
Components	Value	Determinant	Specimen	Sampling Time
Methylene chloride (CAS 75-09-2)	0.3 mg/l	Dichlorometha ne	Urine	*
* - For sampling details, ple	ease see the source docu	ument.		
posure guidelines				
US - California OELs: Ski	n designation			
2,4-Dinitrotoluene (CA			e absorbed throu	
2,6-Dinitrotoluene (CA			e absorbed throu	
p-Nitroaniline (CAS 10 US - Minnesota Haz Subs			e absorbed throu	ugh the skin.
2,4-Dinitrotoluene (CA			esignation appli	es.
2,6-Dinitrotoluene (CA	S 606-20-2)		esignation appli	
p-Nitroaniline (CAS 10		Skin de	esignation appli	es.
US - Tennesse OELs: Ski	•			
2,4-Dinitrotoluene (CA 2,6-Dinitrotoluene (CA	,		e absorbed throu e absorbed throu	•
p-Nitroaniline (CAS 10			absorbed through	
US ACGIH Threshold Lim		ition		
2,4-Dinitrotoluene (CA			e absorbed throu	
2,6-Dinitrotoluene (CA			e absorbed throu	
p-Nitroaniline (CAS 10 US NIOSH Pocket Guide			e absorbed throu	ugn the skin.
2,4-Dinitrotoluene (CA		-	absorbed throu	ugh the skin
2,6-Dinitrotoluene (CA				
p-Nitroaniline (CAS 10	0-01-6)	Can be	e absorbed throu	
US. OSHA Table Z-1 Limi		-	-	
2,4-Dinitrotoluene (CA			e absorbed throu	
2,6-Dinitrotoluene (CA p-Nitroaniline (CAS 10			e absorbed throu e absorbed throu	
propriate engineering				hour) should be used. Ventilation rates
ntrols	should be matched or other engineering exposure limits have	to conditions. If ap controls to mainta onot been establis	plicable, use pro in airborne leve hed, maintain a	bcess enclosures, local exhaust ventilation els below recommended exposure limits. irborne levels to an acceptable level. Eye ble when handling this product.

Individual protection measures, such as personal protective equipment

Eye/face protection	Wear eye/face protection. Wear safety glasses with side shields (or goggles).
Skin protection Hand protection	Wear appropriate chemical resistant gloves.
Other	Wear appropriate chemical resistant clothing.
Respiratory protection	In case of insufficient ventilation, wear suitable respiratory equipment.
Thermal hazards	Wear appropriate thermal protective clothing, when necessary.
General hygiene considerations	When using, do not eat, drink or smoke. Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

9. Physical and chemical properties

	-
Appearance	
Physical state	Liquid.
Form	Liquid
Color	Not available.
Odor	Not available.
Odor threshold	Not available.
рН	Not available.
Melting point/freezing point	-139 °F (-95 °C) estimated
Initial boiling point and boiling range	103.55 °F (39.75 °C) estimated
Flash point	Not available.
Evaporation rate	Not available.
Flammability (solid, gas)	Not available.
Upper/lower flammability or exp	losive limits
Flammability limit - lower (%)	15.5 % estimated
Flammability limit - upper (%)	66.4 % estimated
Explosive limit - lower (%)	Not available.
Explosive limit - upper (%)	Not available.
Vapor pressure	579.97 hPa estimated
Vapor density	Not available.
Relative density	Not available.
Solubility(ies)	
Solubility (water)	Not available.
Partition coefficient (n-octanol/water)	Not available.
Auto-ignition temperature	1033 °F (556.11 °C) estimated
Decomposition temperature	Not available.
Viscosity	Not available.
Other information	
Density	1.324881 g/cm3 estimated
Percent volatile	97.9 % estimated
Specific gravity	1.33 estimated
VOC (Weight %)	97.9 % estimated
10. Stability and reactivity	

ReactivityThe product is stable and non-reactive under normal conditions of use, storage and transport.Chemical stabilityMaterial is stable under normal conditions.Possibility of hazardous
reactionsHazardous polymerization does not occur.Conditions to avoidContact with incompatible materials.Incompatible materialsStrong oxidizing agents.

11. Toxicological information

Ingestion	Harmful if swallowed.
Inhalation	Prolonged inhalation may be harmful. May cause damage to organs by inhalation.
Skin contact	Harmful in contact with skin. Causes skin irritation.
Eye contact	Causes serious eye irritation.
Symptoms related to the physical, chemical and toxicological characteristics	Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Skin irritation. May cause redness and pain.

Information on toxicological effects

Acute toxicity	Harmful if swallowed. Harmful in	contact with skin.
Components	Species	Test Results
1-Chloronaphthalene (CAS	S 90-13-1)	
Acute		
Oral		
LD50	Guinea pig	2000 mg/kg
	Mouse	1091 mg/kg
	Rat	1540 mg/kg
2,3,4,6-Tetrachlorophenol	(CAS 58-90-2)	
Acute		
Dermal		
LD50	Rabbit	250 mg/kg
Oral		
LD50	Gerbil	698 mg/kg
	Guinea pig	250 mg/kg
	Mouse	131 mg/kg
	Rat	140 mg/kg
Other		
LD50	Mouse	82 mg/kg
	Rat	130 mg/kg
2,4,5-Trichlorophenol (CAS	S 95-95-4)	
Acute		
Oral		
LD50	Rat	820 mg/kg
		0.82 g/kg
Other		
LD50	Rat	355 mg/kg
2,4,6-Trichlorophenol (CAS	S 88-06-2)	
Acute		
Oral		
LD50	Rat	820 mg/kg
Other		
LD50	Rat	276 mg/kg
2,4-Dinitrophenol (min 15v	vt% water) (CAS 51-28-5)	
Acute		
<i>Oral</i> LD50	Dog	20 ma/ka
	Dog	20 mg/kg
	Mouse	45 mg/kg
	Rabbit	30 mg/kg
	Rat	30 mg/kg
Other	5	oc. "
LD50	Dog	20 mg/kg

Components	Species	Test Results
	Mouse	26 mg/kg
	Rat	20 mg/kg
2,4-Dinitrotoluene (CAS 121	-14-2)	
Acute		
<i>Dermal</i> LD50	Rat	> 2500 mg/kg
	Rai	> 2500 Hig/kg
Inhalation LC50	Rat	0.24 mg/l
Oral		0.24 mg/r
LD50	Cat	27 mg/kg
	Guinea pig	1300 mg/kg
	Mouse	750 mg/kg
	Rat	268 mg/kg
TD	Dog	1 mg/kg
Other	Dog	T mg/kg
LD50	Mouse	> 500 mg/kg
2,6-Dinitrotoluene (CAS 606		
Acute	/	
Dermal		
LD50	Rat	> 2500 mg/kg
Inhalation		
LC50	Rat	0.24 mg/l
Oral		
LD50	Cat	27 mg/kg
	Guinea pig	1300 mg/kg
	Mouse	621 mg/kg
	Rat	177 mg/kg
TD	Dog	4 mg/kg
Other		
LD50	Mouse	> 500 mg/kg
2-Chloronaphthalene (CAS §	91-58-7)	
Acute		
Oral		
LD50	Mouse	886 mg/kg
	Rat	2078 mg/kg
4-Nitrophenol (CAS 100-02-	7)	
Acute		
<i>Oral</i> LD50	Mouse	380 mg/kg
EDSU	Rabbit	220 mg/kg
	Rat	
Other	Ral	220 - 620 mg/kg
Other LD50	Mouse	75 mg/kg
a-Naphthylamine (CAS 134-		, o mg/kg
A-waphthylanine (CAS 134-	<u>.</u> .,	
Dermal		
LD50	Rat	447 mg/kg
Inhalation		
LC50	Rat	> 0.056 mg/l, 4 Hours
Oral		
LD50	Rat	680 mg/kg
Other		
LD50	Mouse	96 mg/kg

Components	Species	Test Results
	Rat	620 mg/kg
Diethyl phthalate (CAS 84-6	6-2)	
Acute		
Dermal LD50	Rat	> 22400 mg/kg
LDS0	Nat	> 10 ml/kg
labolation		
Inhalation LC50	Rat	> 511 ppm, 6 Hours
2000	Kat	> 4.64 mg/l, 6 Hours
Oral		
LD50	Mouse	2500 mg/kg
	Rabbit	1000 mg/kg
	Rat	9500 - 31000 mg/kg
		8.2 ml/kg
Other		
LD50	Mouse	3.22 g/kg
		2.87 ml/kg
Dimethyl phthalate (CAS 13	1-11-3)	J. J
Acute	- ,	
Dermal		
LD50	Rabbit	> 12000 mg/kg
	Rat	38000 mg/kg
Inhalation		
LC50	-	6.76 mg/l
	Rat	> 10.4 mg/l, 6 Hours
Oral		
LD50	Guinea pig	2400 mg/kg
	Hen	10200 mg/kg
	Mouse	7200 mg/kg
	Rabbit	5300 mg/kg
	Rat	2400 mg/kg
Other		
LD50	Mouse	1380 mg/kg
	Rat	324 mg/kg
Methylene chloride (CAS 75	-09-2)	
Acute		
Dermal LD50	Rat	> 2000 mg/kg
Inhalation	Nat	
LC50	Guinea pig	11600 ppm, 6 Hours
		40.2 mg/l, 6 Hours
	Mouse	14400 ppm, 7 Hours
		51.5 mg/l, 2 Hours
		49.1 mg/l, 6 Hours
		49 mg/l, 7 Hours
	Rat	2000 mg/l, 15 Minutes
		88 mg/l, 900 Days
		79 mg/l, 2 Hours
		52 mg/l, 6 Hours
	Mouse	
LD50	Mouse	16000 ppm, 7 Hours

Components	Species	Test Results	
Oral	Pat	1600 malka	
LD50	Rat	1600 mg/kg	
Other LD50	Mouroo	127 ma/ka	
	Mouse	437 mg/kg	
n-Nitroaniline (CAS 99-09-2)			
Acute			
Oral LD50	Guinea pig	450 mg/kg	
2000			
	Mouse	308 mg/kg	
	Rat	535 mg/kg	
o-Nitroaniline (CAS 88-74-4)			
Acute			
Dermal LD50	Rabbit	> 7940 mg/kg	
	Rabbit	> 7940 mg/kg	
Inhalation LC50	Rat	> 2 520 mg// 4 Hours	
	Rai	> 2.529 mg/l, 4 Hours	
Oral LD50		2350 mg/kg	
LD50	Guinea pig		
	Mouse	1070 mg/kg	
	Rat	1600 mg/kg	
Pentachlorobenzene (CAS 608-9	3-5)		
Acute			
Oral		<i></i>	
LD50	Mouse	1175 mg/kg	
	Rat	940 mg/kg	
o-Nitroaniline (CAS 100-01-6)			
Acute			
Dermal		0700 //	
LD50	Rat	> 2500 mg/kg	
Oral		450 1	
LD50	Guinea pig	450 mg/kg	
	Mouse	810 mg/kg	
	Rat	750 mg/kg	
Other			
LD50	Mouse	250 mg/kg	
* Estimates for product may	he beend on additional com	an an anti-data mat ab aura	
* Estimates for product may		iponent data not snown.	
Skin corrosion/irritation	Causes skin irritation.	ation	
Serious eye damage/eye irritation	Causes serious eye irrit		
Respiratory or skin sensitization	n		
Respiratory sensitization	Not available.		
Skin sensitization		acted to cause skin sensitization.	
Germ cell mutagenicity		This product is not expected to cause skin sensitization. No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.	
Carcinogenicity	May cause cancer.		
IARC Monographs. Overall	-	nicity	
2,3,4,6-Tetrachlorophen	-	2B Possibly carcinogenic to humans.	
2,4,5-Trichlorophenol (C	CAS 95-95-4)	2B Possibly carcinogenic to humans.	
2,4,6-Trichlorophenol (CAS		2B Possibly carcinogenic to humans.	
2,4-Dinitrotoluene (CAS 2,6-Dinitrotoluene (CAS		2B Possibly carcinogenic to humans. 2B Possibly carcinogenic to humans.	
Acenaphthene (CAS 83		3 Not classifiable as to carcinogenicity to humans.	
a-Naphthylamine (CAS	134-32-7)	3 Not classifiable as to carcinogenicity to humans.	
	b-Naphthylamine (CAS 91-59-8) 1 Carcinogenic to humans.		
Fluorene (CAS 86-73-7)	1	3 Not classifiable as to carcinogenicity to humans.	

Methylene chloride (CAS	75-09-2)	2B Possibly carcinogenic to humans.
US. National Toxicology Program (NTP) Report on Carcinogens		
2,4,6-Trichlorophenol (CA	AS 88-06-2)	Reasonably Anticipated to be a Human Carcinogen.
b-Naphthylamine (CAS 9	1-59-8)	Known To Be Human Carcinogen.
Methylene chloride (CAS	75-09-2)	Reasonably Anticipated to be a Human Carcinogen.
US. OSHA Specifically Regu	lated Substances (29 CFR 19	10.1001-1050)
a-Naphthylamine (CAS 1	34-32-7)	Cancer
b-Naphthylamine (CAS 9	1-59-8)	Cancer
Methylene chloride (CAS	75-09-2)	Cancer
Reproductive toxicity	Suspected of damaging fertilit	у.
Specific target organ toxicity - single exposure	Not classified.	
Specific target organ toxicity - repeated exposure	May cause damage to organs through prolonged or repeated exposure.	
Aspiration hazard	Not available.	
Chronic effects	Prolonged inhalation may be h damage to organs through pro	narmful. Prolonged exposure may cause chronic effects. May cause plonged or repeated exposure.

12. Ecological information

Ecotoxicity Harmful to aquatic life with long lasting effects. Accumulation in aquatic organisms is expected.

Components		Species	Test Results
1,2,4,5-Tetrachlorobenz	zene (CAS 95-94-3	3)	
Aquatic			
Fish	LC50	Fathead minnow (Pimephales promelas)	0.32 mg/l, 96 hours
1-Chloronaphthalene (C	CAS 90-13-1)		
Aquatic			
Fish	LC50	Sheepshead minnow (Cyprinodon variegatus)	0.69 mg/l, 96 hours
2,3,4,6-Tetrachloropher	nol (CAS 58-90-2)		
Aquatic			
Fish	LC50	Bluegill (Lepomis macrochirus)	0.11 - 0.16 mg/l, 96 hours
2,4,5-Trichlorophenol (C	CAS 95-95-4)		
Aquatic			
Crustacea	EC50	Water flea (Daphnia magna)	0.72 - 1.2 mg/l, 48 hours
Fish	LC50	Bluegill (Lepomis macrochirus)	0.39 - 0.54 mg/l, 96 hours
2,4,6-Trichlorophenol (0	CAS 88-06-2)		
Aquatic			
Crustacea	EC50	Water flea (Daphnia magna)	1.8 - 2.6 mg/l, 48 hours
Fish	LC50	Bluegill (Lepomis macrochirus)	0.35 - 0.49 mg/l, 96 hours
2,4-Dinitrophenol (min 1	15wt% water) (CA	S 51-28-5)	
Aquatic			
Crustacea	EC50	Water flea (Daphnia magna)	3.4 - 5.66 mg/l, 48 hours
Fish	LC50	Asiatic knifefish (Notopterus notopterus)	0.9 mg/l, 96 hours
2,4-Dinitrotoluene (CAS	5 121-14-2)		
Aquatic			
Crustacea	EC50	Water flea (Daphnia magna)	22.5 - 30.5 mg/l, 48 hours
Fish	LC50	Zebra danio (Danio rerio)	10 - 60 mg/l, 96 hours
2,6-Dinitrotoluene (CAS	606-20-2)		
Aquatic			
Crustacea	EC50	Water flea (Daphnia magna)	21.7 mg/l, 48 hours
Fish	LC50	Fathead minnow (Pimephales promelas)	17.2 - 20.2 mg/l, 96 hours
4-Chlorophenyl phenyl	ether (CAS 7005-7	72-3)	
Aquatic			
Fish	LC50	Brook trout (Salvelinus fontinalis)	0.65 - 0.82 mg/l, 96 hours

Components		Species	Test Results
4-Nitrophenol (CAS 100	0-02-7)		
Aquatic			
Crustacea	EC50	Water flea (Daphnia magna)	3.1 - 7.1 mg/l, 48 hours
Fish	LC50	Zebra danio (Danio rerio)	5.6 - 13.9 mg/l, 96 hours
Acenaphthene (CAS 83	3-32-9)		
Aquatic			
Crustacea	EC50	Water flea (Daphnia magna)	1.102 - 1.475 mg/l, 48 hours
Fish	LC50	Fathead minnow (Pimephales promelas)	0.52 - 0.71 mg/l, 96 hours
Dibenzofuran (CAS 132	2-64-9)		
Aquatic			
Fish	LC50	Fathead minnow (Pimephales promelas)	0.84 - 1.31 mg/l, 96 hours
Diethyl phthalate (CAS	84-66-2)		
Aquatic			
Crustacea	EC50	Water flea (Daphnia magna)	86 mg/l, 48 hours
Fish	LC50	Rainbow trout,donaldson trout (Oncorhynchus mykiss)	12 mg/l, 96 hours
Dimethyl phthalate (CA	S 131-11-3)		
Aquatic			
Crustacea	EC50	Water flea (Daphnia magna)	45.9 mg/l, 48 hours
Fish	LC50	Sheepshead minnow (Cyprinodon variegatus)	29 mg/l, 96 hours
Fluorene (CAS 86-73-7)		
Aquatic			
Crustacea	EC50	Water flea (Daphnia pulex)	0.212 mg/l, 48 hours
Fish	LC50	Rainbow trout,donaldson trout (Oncorhynchus mykiss)	0.55 - 1.21 mg/l, 96 hours
Methylene chloride (CA	S 75-09-2)		
Aquatic			
Crustacea	EC50	Water flea (Daphnia magna)	1250 mg/l, 48 hours
Fish	LC50	Fathead minnow (Pimephales promelas)	140.8 - 277.8 mg/l, 96 hours
m-Nitroaniline (CAS 99	-09-2)		
Aquatic			
Crustacea	EC50	Water flea (Daphnia magna)	0.195 - 2.02 mg/l, 48 hours
Fish	LC50	Guppy (Poecilia reticulata)	72.6 - 91.8 mg/l, 96 hours
o-Nitroaniline (CAS 88-	74-4)		
Aquatic			
Crustacea	EC50	Water flea (Daphnia magna)	4.08 - 6 mg/l, 48 hours
Pentachlorobenzene (C	CAS 608-93-5)		
Aquatic			
Fish	LC50	Bluegill (Lepomis macrochirus)	0.18 - 0.32 mg/l, 96 hours
p-Nitroaniline (CAS 100)-01-6)		
Aquatic			
Crustacea	EC50	Water flea (Daphnia magna)	17 mg/l, 48 hours
Fish	LC50	Fathead minnow (Pimephales promelas)	85.7 - 117 mg/l, 96 hours

* Estimates for product may be based on additional component data not shown.

No data available.

Persistence and degradability No data is available on the degradability of this product.

Bioaccumulative potential

Partition coefficient n-octanol / water (log Kow)	
1,2,4,5-Tetrachlorobenzene	4.6
1-Chloronaphthalene	4
2,3,4,6-Tetrachlorophenol	4.45
2,4,5-Trichlorophenol	3.72
2,4,6-Trichlorophenol	3.69
2,4-Dinitrophenol (min 15wt% water)	1.67

Partition coefficient n-octand	ol / water (log Kow)	
2,4-Dinitrotoluene		1.98
2,6-Dinitrotoluene		2.1
2-Chloronaphthalene		3.9
4-Chlorophenyl phenyl ether		4.08
4-Nitrophenol		1.91
Acenaphthene		3.92
Acenaphthylene		4.07
a-Naphthylamine		2.25
Dibenzofuran		4.12
Diethyl phthalate		2.47
Dimethyl phthalate		1.6
Methylene chloride		1.25
m-Nitroaniline		1.37
Pentachlorobenzene		5.18
p-Nitroaniline		1.39
Mobility in soil	No data available.	

Other adverse effects

No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

13. Disposal considerations

Disposal instructions	Collect and reclaim or dispose in sealed containers at licensed waste disposal site. This material and its container must be disposed of as hazardous waste. Do not allow this material to drain into sewers/water supplies. Do not contaminate ponds, waterways or ditches with chemical or used container. Dispose of contents/container in accordance with local/regional/national/international regulations.
Local disposal regulations	Dispose in accordance with all applicable regulations.
Hazardous waste code	The waste code should be assigned in discussion between the user, the producer and the waste disposal company.

US RCRA Hazardous Waste P List: Reference

2,4-Dinitrophenol (min 15wt% water) (CAS 51-28-5)	P048
p-Nitroaniline (CAS 100-01-6)	P077
US RCRA Hazardous Waste U List: Reference	
1,2,4,5-Tetrachlorobenzene (CAS 95-94-3)	U207
2,4-Dinitrotoluene (CAS 121-14-2)	U105
2,6-Dinitrotoluene (CAS 606-20-2)	U106
2-Chloronaphthalene (CAS 91-58-7)	U047
4-Nitrophenol (CAS 100-02-7)	U170
a-Naphthylamine (CAS 134-32-7)	U167
b-Naphthylamine (CAS 91-59-8)	U168
Diethyl phthalate (CAS 84-66-2)	U088
Dimethyl phthalate (CAS 131-11-3)	U102
Methylene chloride (CAS 75-09-2)	U080
Pentachlorobenzene (CAS 608-93-5)	U183

Waste from residues / unused Dispose of in accordance with local regulations. Empty containers or liners may retain some products Disposal instructions).

Contaminated packaging

Empty containers should be taken to an approved waste handling site for recycling or disposal. Since emptied containers may retain product residue, follow label warnings even after container is emptied.

14. Transport information

DOT	
UN number	UN1593
UN proper shipping name	Dichloromethane, solution
Transport hazard class(es)	
Class	6.1(PGIII)
Subsidiary risk	-
Label(s)	6.1
Packing group	III
Special precautions for user	Read safety instructions, SDS and emergency procedures before handling.
Special provisions	IB3, IP8, N36, T7, TP2
Packaging exceptions	153
Packaging non bulk	203
Packaging bulk	241

ΙΑΤΑ

IATA	
UN number	UN1593
UN proper shipping name	Dichloromethane solution
Transport hazard class(es)	
Class	6.1(PGIII)
Subsidiary risk	-
Packing group	III
Environmental hazards	No.
ERG Code	6L
Special precautions for user	Read safety instructions, SDS and emergency procedures before handling.
Other information	
Passenger and cargo	Allowed.
aircraft	
Cargo aircraft only	Allowed.
IMDG	
UN number	UN1593
UN proper shipping name	DICHLOROMETHANE SOLUTION
Transport hazard class(es)	
Class	6.1(PGIII)
Subsidiary risk	-
Packing group	III
Environmental hazards	
Marine pollutant	No.
EmS	F-A, S-A
Special precautions for user	Read safety instructions, SDS and emergency procedures before handling.
Transport in bulk according to	Not available.
Annex II of MARPOL 73/78 and	
the IBC Code	
DOT	
^	



15. Regulatory information

US federal regulations

This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

One or more components are not listed on TSCA.

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

1,2,4,5-Tetrachlorobenzene (CAS 95-94-3) 2,4,5-Trichlorophenol (CAS 95-95-4) Pentachlorobenzene (CAS 608-93-5) p-Nitroaniline (CAS 100-01-6)

CERCLA Hazardous Substance List (40 CFR 302.4)

1,2,4,5-Tetrachlorobenzene (CAS 95-94-3) 1-Chloronaphthalene (CAS 90-13-1) 2,3,4,6-Tetrachlorophenol (CAS 58-90-2)

- 1.0 % One-Time Export Notification only.
 0.1 % One-Time Export Notification only.
 1.0 % One-Time Export Notification only.
 1.0 % One-Time Export Notification only.
- Listed. Listed. Listed.

	2,4,5-Trichlorophenol (CA		Listed.	
	2,4,6-Trichlorophenol (CA		Listed.	
		wt% water) (CAS 51-28-5)	Listed.	
	2,4-Dinitrotoluene (CAS 1		Listed.	
	2,6-Dinitrotoluene (CAS 6	,	Listed.	
	2-Chloronaphthalene (CA		Listed.	
	4-Chlorophenyl phenyl et		Listed.	
	4-Nitrophenol (CAS 100-0 Acenaphthene (CAS 83-3		Listed.	
	Acenaphthylene (CAS 03-3		Listed. Listed.	
	a-Naphthylamine (CAS 1		Listed.	
	b-Naphthylamine (CAS 9		Listed.	
	Dibenzofuran (CAS 132-6		Listed.	
	Diethyl phthalate (CAS 84		Listed.	
	Dimethyl phthalate (CAS		Listed.	
	Fluorene (CAS 86-73-7)	,	Listed.	
	Methylene chloride (CAS	75-09-2)	Listed.	
	Pentachlorobenzene (CA	S 608-93-5)	Listed.	
	p-Nitroaniline (CAS 100-0)1-6)	Listed.	
	SARA 304 Emergency release	se notification		
	Not regulated.			
	•	lated Substances (29 CFR 1	910.1001-1050)	
	a-Naphthylamine (CAS 1		Cancer	
	b-Naphthylamine (CAS 9		Cancer	
	Methylene chloride (CAS		Cancer	
	a-Naphthylamine (CAS 1		Skin irritation	
	b-Naphthylamine (CAS 9		Acute toxicity	
	Methylene chloride (CAS		Heart	
	a-Naphthylamine (CAS 1	34-32-7)	Acute toxicity	
Methylene chloride (CAS 7		75-09-2)	Central nervous	system
			Liver	
			Skin irritation	
			Eye irritation	
Sup	perfund Amendments and Re	authorization Act of 1986 (SA	ARA)	
	Hazard categories	Immediate Hazard - Yes		
		Delayed Hazard - Yes		
		Fire Hazard - No		
		Pressure Hazard - No		
		Reactivity Hazard - No		
	SARA 302 Extremely hazard	lous substance		
	Not listed.			
	SARA 311/312 Hazardous	No		
	chemical			
	SARA 313 (TRI reporting)			
	Chemical name		CAS number	% b
	Methylene chloride		75-09-2	90 -
	2,3,4,6-Tetrachloropheno	I	58-90-2	0.1
	2,4,6-Trichlorophenol	-	88-06-2	0.1
	2,4-Dinitrotoluene		121-14-2	0.1
	2,6-Dinitrotoluene		606-20-2	0.1
	a-Naphthylamine		134-32-7	0.1
	b-Naphthylamine		91-59-8	0.1
Oth	er federal regulations			
Ju	-	110 Hozordovo Ala Dellutera		
	Glean Air Act (GAA) Section	112 Hazardous Air Pollutan	IS (MAPS) LIST	

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

2,4,5-Trichlorophenol (CAS 95-95-4) 2,4,6-Trichlorophenol (CAS 88-06-2) 2,4-Dinitrophenol (min 15wt% water) (CAS 51-28-5) 2,4-Dinitrotoluene (CAS 121-14-2) 4-Nitrophenol (CAS 100-02-7) Acenaphthene (CAS 83-32-9) Acenaphthylene (CAS 208-96-8) a-Naphthylamine (CAS 134-32-7) b-Naphthylamine (CAS 91-59-8) Dibenzofuran (CAS 132-64-9) Dimethyl phthalate (CAS 131-11-3) Fluorene (CAS 86-73-7) Methylene chloride (CAS 75-09-2) % by wt. 90 - 100 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130) Not regulated. Safe Drinking Water Act Not regulated. (SDWA) US state regulations **US. Massachusetts RTK - Substance List** 1.2.4.5-Tetrachlorobenzene (CAS 95-94-3) 2,3,4,6-Tetrachlorophenol (CAS 58-90-2) 2,4,5-Trichlorophenol (CAS 95-95-4) 2,4,6-Trichlorophenol (CAS 88-06-2) 2,4-Dinitrophenol (min 15wt% water) (CAS 51-28-5) 2,4-Dinitrotoluene (CAS 121-14-2) 2,6-Dinitrotoluene (CAS 606-20-2) 2-Chloronaphthalene (CAS 91-58-7) 4-Chlorophenyl phenyl ether (CAS 7005-72-3) 4-Nitrophenol (CAS 100-02-7) Acenaphthene (CAS 83-32-9) Acenaphthylene (CAS 208-96-8) a-Naphthylamine (CAS 134-32-7) b-Naphthylamine (CAS 91-59-8) Dibenzofuran (CAS 132-64-9) Diethyl phthalate (CAS 84-66-2) Dimethyl phthalate (CAS 131-11-3) Fluorene (CAS 86-73-7) Methylene chloride (CAS 75-09-2) Pentachlorobenzene (CAS 608-93-5) p-Nitroaniline (CAS 100-01-6) US. New Jersey Worker and Community Right-to-Know Act 2,3,4,6-Tetrachlorophenol (CAS 58-90-2) 500 LBS 2,4,5-Trichlorophenol (CAS 95-95-4) 500 LBS 2,4,6-Trichlorophenol (CAS 88-06-2) 500 LBS 2,4-Dinitrophenol (min 15wt% water) (CAS 51-28-5) 500 LBS 2,4-Dinitrotoluene (CAS 121-14-2) 500 LBS 2.6-Dinitrotoluene (CAS 606-20-2) 500 LBS 2-Chloronaphthalene (CAS 91-58-7) 500 LBS 4-Nitrophenol (CAS 100-02-7) 500 LBS a-Naphthylamine (CAS 134-32-7) 500 LBS b-Naphthylamine (CAS 91-59-8) 500 LBS Dibenzofuran (CAS 132-64-9) 500 LBS Diethyl phthalate (CAS 84-66-2) 500 LBS Dimethyl phthalate (CAS 131-11-3) 500 LBS Methylene chloride (CAS 75-09-2) 500 LBS Pentachlorobenzene (CAS 608-93-5) 500 LBS p-Nitroaniline (CAS 100-01-6) 500 LBS US. Pennsylvania RTK - Hazardous Substances 1,2,4,5-Tetrachlorobenzene (CAS 95-94-3) 1-Chloronaphthalene (CAS 90-13-1) 2,3,4,6-Tetrachlorophenol (CAS 58-90-2) 2,4,5-Trichlorophenol (CAS 95-95-4) 2,4,6-Trichlorophenol (CAS 88-06-2) 2,4-Dinitrophenol (min 15wt% water) (CAS 51-28-5) 2,4-Dinitrotoluene (CAS 121-14-2) 2,6-Dinitrotoluene (CAS 606-20-2) 2-Chloronaphthalene (CAS 91-58-7) 4-Chlorophenyl phenyl ether (CAS 7005-72-3) 4-Nitrophenol (CAS 100-02-7) Acenaphthene (CAS 83-32-9) Acenaphthylene (CAS 208-96-8) a-Naphthylamine (CAS 134-32-7) b-Naphthylamine (CAS 91-59-8) Dibenzofuran (CAS 132-64-9) Diethyl phthalate (CAS 84-66-2) Dimethyl phthalate (CAS 131-11-3) Fluorene (CAS 86-73-7) Methylene chloride (CAS 75-09-2) Pentachlorobenzene (CAS 608-93-5) p-Nitroaniline (CAS 100-01-6)

US. Rhode Island RTK

1,2,4,5-Tetrachlorobenzene (CAS 95-94-3) 1-Chloronaphthalene (CAS 90-13-1) 2,3,4,6-Tetrachlorophenol (CAS 58-90-2) 2,4,5-Trichlorophenol (CAS 95-95-4) 2,4,6-Trichlorophenol (CAS 88-06-2) 2,4-Dinitrophenol (min 15wt% water) (CAS 51-28-5) 2,4-Dinitrotoluene (CAS 121-14-2) 2,6-Dinitrotoluene (CAS 606-20-2) 2-Chloronaphthalene (CAS 91-58-7) 4-Chlorophenyl phenyl ether (CAS 7005-72-3) 4-Nitrophenol (CAS 100-02-7) Acenaphthene (CAS 83-32-9) Acenaphthylene (CAS 208-96-8) a-Naphthylamine (CAS 134-32-7) b-Naphthylamine (CAS 91-59-8) Dibenzofuran (CAS 132-64-9) Diethyl phthalate (CAS 84-66-2) Dimethyl phthalate (CAS 131-11-3) Fluorene (CAS 86-73-7) Methylene chloride (CAS 75-09-2) Pentachlorobenzene (CAS 608-93-5) p-Nitroaniline (CAS 100-01-6)

US. California Proposition 65

WARNING: This product contains a chemical known to the State of California to cause cancer and birth defects or other reproductive harm.

US - California Proposition 65 - CRT: Listed date/Carcinogenic substance

ountrv(s) or region	Inventory name		On inventory (ves/n
ational Inventories			
2,6-Dinitrotoluene (C	CAS 606-20-2)	Listed: August 20, 1999	
2,4-Dinitrotoluene (C	CAS 121-14-2)	Listed: August 20, 1999	
US - California Proposi	tion 65 - CRT: Listed date/M	lale reproductive toxin	
2,6-Dinitrotoluene (C	CAS 606-20-2)	Listed: August 20, 1999	
2,4-Dinitrotoluene (C	CAS 121-14-2)	Listed: August 20, 1999	
US - California Proposi	tion 65 - CRT: Listed date/F	emale reproductive toxin	
Methylene chloride ((CAS 75-09-2)	Listed: April 1, 1988	
b-Naphthylamine (C	AS 91-59-8)	Listed: February 27, 1987	
a-Naphthylamine (C	AS 134-32-7)	Listed: October 1, 1989	
2,6-Dinitrotoluene (C	CAS 606-20-2)	Listed: July 1, 1995	
2,4-Dinitrotoluene (C	CAS 121-14-2)	Listed: July 1, 1988	
2,4,6-Trichloropheno	ol (CAS 88-06-2)	Listed: January 1, 1988	

Internat

Country(s) or region	Inventory name	On inventory (yes/no)*
Australia	Australian Inventory of Chemical Substances (AICS)	No
Canada	Domestic Substances List (DSL)	No
Canada	Non-Domestic Substances List (NDSL)	Yes
China	Inventory of Existing Chemical Substances in China (IECSC)	No
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	Yes
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Inventory of Existing and New Chemical Substances (ENCS)	No
Korea	Existing Chemicals List (ECL)	No
New Zealand	New Zealand Inventory	No
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	No
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	No

*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s) A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

16. Other information, including date of preparation or last revision

Issue date	11-06-2014
Version #	01
NFPA ratings	Health: 2 Flammability: 1 Instability: 0

The above information is believed to be correct on the date it was last revised and must not be considered all inclusive. The information has been obtained only by a search of available literature and is only a guide for handling the chemicals. OSHA regulations require that if other hazards become evident, an upgraded SDS must be made available to the employee within three months. RESPONSIBILITY for updates lies with the employer and not with CHEM SERVICE, Inc.

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