SAFETY DATA SHEET

1. Identification

Product identifier **PCB Mixture of 12 Analytes**

Other means of identification

Item M-PCBMIX12AK10

Recommended use For Laboratory Use Only

Recommended restrictions None known.

Manufacturer/Importer/Supplier/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	Flammable liquids	Category 2
Health hazards	Skin corrosion/irritation	Category 2
	Specific target organ toxicity, single exposure	Category 3 narcotic effects
	Aspiration hazard	Category 1
Environmental hazards	Hazardous to the aquatic environment, acute hazard	Category 1
	Hazardous to the aquatic environment, long-term hazard	Category 1

OSHA defined hazards Not classified.

Label elements

Signal word Danger

Hazard statement Highly flammable liquid and vapor. May be fatal if swallowed and enters airways. Causes skin irritation. May cause drowsiness or dizziness. Very toxic to aquatic life. Very toxic to aquatic life with long lasting effects.

Precautionary statement

Prevention Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Keep container tightly closed. 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 mist/vapors. Wash thoroughly after handling. Use only outdoors or in a well-ventilated area. Avoid release to the environment. Wear protective gloves/protective clothing/eye protection/face protection.

Response If swallowed: Immediately call a poison center/doctor. Do NOT induce vomiting. 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. Call a poison center/doctor if you feel unwell. If skin irritation occurs: Get medical advice/attention. Take off contaminated clothing and wash it before reuse. In case of fire: Use appropriate media to extinguish. Collect spillage.

Storage Store in a well-ventilated place. Keep container tightly closed. Store in a well-ventilated place. Keep cool. Store locked up.

Disposal	Dispose of contents/container in accordance with local/regional/national/international regulations.
Hazard(s) not otherwise classified (HNOC)	Static accumulating flammable liquid can become electrostatically charged even in bonded and grounded equipment. Sparks may ignite liquid and vapor. May cause flash fire or explosion.
Supplemental information	None.

3. Composition/information on ingredients

Mixtures

Chemical name	Common name and synonyms	CAS number	%
Isooctane	2,2,4-Trimethylpentane	540-84-1	99.988
2,3,3',4,4',5,5'-Heptachlorobiphenyl		39635-31-9	0.001
2,3,3',4,4',5'-Hexachlorobiphenyl		69782-90-7	0.001
2,3,3',4,4',5-Hexachlorobiphenyl		38380-08-4	0.001
2,3,3',4,4'-Pentachlorobiphenyl		32598-14-4	0.001
2,3',4,4',5,5'-Hexachlorobiphenyl		52663-72-6	0.001
2',3,4,4',5-Pentachlorobiphenyl		65510-44-3	0.001
2,3',4,4',5-Pentachlorobiphenyl		31508-00-6	0.001
2,3,4,4',5-Pentachlorobiphenyl		74472-37-0	0.001
3,3',4,4',5,5'-Hexachlorobiphenyl		32774-16-6	0.001
3,3',4,4',5-Pentachlorobiphenyl		57465-28-8	0.001
3,3',4,4'-Tetrachlorobiphenyl		32598-13-3	0.001
3,4,4',5-Tetrachlorobiphenyl		70362-50-4	0.001

4. First-aid measures

Inhalation	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a poison center or doctor/physician if you feel unwell.
Skin contact	Take off immediately all contaminated clothing. Rinse skin with water/shower. If skin irritation occurs: Get medical advice/attention. Wash contaminated clothing 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. Get medical attention if irritation develops and persists.
Ingestion	Call a physician or poison control center immediately. Rinse mouth. Do not induce vomiting. If vomiting occurs, keep head low so that stomach content doesn't get into the lungs.
Most important symptoms/effects, acute and delayed	Aspiration may cause pulmonary edema and pneumonitis. May cause drowsiness or dizziness. Headache. Nausea, vomiting. Direct contact with eyes may cause temporary irritation. Skin irritation. May cause redness and pain.
Indication of immediate medical attention and special treatment needed	Provide general supportive measures and treat symptomatically. Thermal burns: Flush with water immediately. While flushing, remove clothes which do not adhere to affected area. Call an ambulance. Continue flushing during transport to hospital. Keep victim under observation. Symptoms may be delayed.
General information	Take off all contaminated clothing immediately. 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. Carbon dioxide (CO2). Dry chemical powder, carbon dioxide, sand or earth may be used for small fires only.
Unsuitable extinguishing media	Do not use water jet as an extinguisher, as this will spread the fire.
Specific hazards arising from the chemical	Vapors may form explosive mixtures with air. Vapors may travel considerable distance to a source of ignition and flash back. This product is a poor conductor of electricity and can become electrostatically charged. If sufficient charge is accumulated, ignition of flammable mixtures can occur. To reduce potential for static discharge, use proper bonding and grounding procedures. This liquid may accumulate static electricity when filling properly grounded containers. Static electricity accumulation may be significantly increased by the presence of small quantities of water or other contaminants. Material will float and may ignite on surface of water. 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	In case of fire and/or explosion do not breathe fumes. 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	Highly flammable liquid and vapor.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Wear appropriate protective equipment and clothing during clean-up. Avoid breathing mist/vapors. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ventilate closed spaces before entering them. Use appropriate containment to avoid environmental contamination. Transfer by mechanical means such as vacuum truck to a salvage tank or other suitable container for recovery or safe disposal. 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

Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Keep combustibles (wood, paper, oil, etc.) away from spilled material. Take precautionary measures against static discharge. Use only non-sparking tools. This material is classified as a water pollutant under the Clean Water Act and should be prevented from contaminating soil or from entering sewage and drainage systems which lead to waterways.

Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Use a non-combustible material like vermiculite, sand or earth to soak up the product and place into a container for later disposal. Following product recovery, flush area with water.

Small Spills: Absorb with earth, sand or other non-combustible material and transfer to containers for later disposal. Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.

Never return spills to original containers for re-use. For waste disposal, see section 13 of the SDS.

Environmental precautions

Avoid release to the environment. Inform appropriate managerial or supervisory personnel of all environmental releases. Prevent further leakage or spillage if safe to do so. Avoid discharge into drains, water courses or onto the ground. Use appropriate containment to avoid environmental contamination.

7. Handling and storage

Precautions for safe handling

Do not handle, store or open near an open flame, sources of heat or sources of ignition. Protect material from direct sunlight. When using do not smoke. Explosion-proof general and local exhaust ventilation. Minimize fire risks from flammable and combustible materials (including combustible dust and static accumulating liquids) or dangerous reactions with incompatible materials. Handling operations that can promote accumulation of static charges include but are not limited to: mixing, filtering, pumping at high flow rates, splash filling, creating mists or sprays, tank and container filling, tank cleaning, sampling, gauging, switch loading, vacuum truck operations. Take precautionary measures against static discharges. All equipment used when handling the product must be grounded. Use non-sparking tools and explosion-proof equipment. Avoid breathing mist/vapors. Avoid contact with eyes, skin, and clothing. Avoid prolonged exposure. Wear appropriate personal protective equipment. Wash hands thoroughly after handling. Avoid release to the environment. Observe good industrial hygiene practices.

For additional information on equipment bonding and grounding, refer to the Canadian Electrical Code in Canada, (CSA C22.1), or the American Petroleum Institute (API) Recommended Practice 2003, "Protection Against Ignitions Arising out of Static, Lightning, and Stray Currents" or National Fire Protection Association (NFPA) 77, "Recommended Practice on Static Electricity" or National Fire Protection Association (NFPA) 70, "National Electrical Code".

Conditions for safe storage, including any incompatibilities

Store locked up. Keep away from heat, sparks and open flame. Prevent electrostatic charge build-up by using common bonding and grounding techniques. Eliminate sources of ignition. Avoid spark promoters. Ground/bond container and equipment. These alone may be insufficient to remove static electricity. Store in a cool, dry place out of direct sunlight. Store in tightly closed container. Store in a well-ventilated place. Keep in an area equipped with sprinklers. Store away from incompatible materials (see Section 10 of the SDS).

8. Exposure controls/personal protection

Occupational exposure limits

The following constituents are the only constituents of the product which have a PEL, TLV or other recommended exposure limit. At this time, the other constituents have no known exposure limits.

US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

Components	Type	Value
3,3',4,4'-Tetrachlorobipheny l (CAS 32598-13-3)	PEL	1 mg/m3
Isooctane (CAS 540-84-1)	PEL	2350 mg/m3
		500 ppm

US. ACGIH Threshold Limit Values

Components	Type	Value
3,3',4,4'-Tetrachlorobipheny l (CAS 32598-13-3)	TWA	1 mg/m3

US. NIOSH: Pocket Guide to Chemical Hazards

Components	Type	Value
2,3,3',4,4',5,5'-Heptachlorob iphenyl (CAS 39635-31-9)	TWA	0.001 mg/m3
2,3,3',4,4',5'-Hexachlorobip henyl (CAS 69782-90-7)	TWA	0.001 mg/m3
2,3,3',4,4',5-Hexachlorobiph enyl (CAS 38380-08-4)	TWA	0.001 mg/m3
2,3,3',4,4'-Pentachlorobiphe nyl (CAS 32598-14-4)	TWA	0.001 mg/m3
2,3',4,4',5,5'-Hexachlorobip henyl (CAS 52663-72-6)	TWA	0.001 mg/m3
2,3,4,4',5-Pentachlorobiphe nyl (CAS 74472-37-0)	TWA	0.001 mg/m3
2,3',4,4',5-Pentachlorobiphe nyl (CAS 31508-00-6)	TWA	0.001 mg/m3
2',3,4,4',5-Pentachlorobiphe nyl (CAS 65510-44-3)	TWA	0.001 mg/m3
3,3',4,4',5,5'-Hexachlorobip henyl (CAS 32774-16-6)	TWA	0.001 mg/m3
3,3',4,4',5-Pentachlorobiphe nyl (CAS 57465-28-8)	TWA	0.001 mg/m3
3,4,4',5-Tetrachlorobiphenyl (CAS 70362-50-4)	TWA	0.001 mg/m3
Isooctane (CAS 540-84-1)	Ceiling	1800 mg/m3
		385 ppm
	TWA	350 mg/m3
		75 ppm

Biological limit values No biological exposure limits noted for the ingredient(s).

Exposure guidelines

US - California OELs: Skin designation

3,3',4,4'-Tetrachlorobiphenyl (CAS 32598-13-3) Can be absorbed through the skin.

US - Tennessee OELs: Skin designation

3,3',4,4'-Tetrachlorobiphenyl (CAS 32598-13-3) Can be absorbed through the skin.

US ACGIH Threshold Limit Values: Skin designation

3,3',4,4'-Tetrachlorobiphenyl (CAS 32598-13-3) Danger of cutaneous absorption

US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

3,3',4,4'-Tetrachlorobiphenyl (CAS 32598-13-3) Can be absorbed through the skin.

Appropriate engineering controls Explosion-proof general and local exhaust ventilation. Good general ventilation should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. Provide eyewash station and safety shower.

Individual protection measures, such as personal protective equipment

Eye/face protection Chemical respirator with organic vapor cartridge and full facepiece.

Skin protection	
Hand protection	Wear appropriate chemical resistant gloves.
Other	Wear appropriate chemical resistant clothing.
Respiratory protection	Chemical respirator with organic vapor cartridge and full facepiece.
Thermal hazards	Wear appropriate thermal protective clothing, when necessary.
General hygiene considerations	When using do not 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.
pH	Not available.
Melting point/freezing point	-161.41 °F (-107.45 °C) estimated
Initial boiling point and boiling range	210.63 °F (99.24 °C) estimated
Flash point	40.1 °F (4.5 °C) estimated
Evaporation rate	Not available.
Flammability (solid, gas)	Not applicable.
Upper/lower flammability or explosive limits	
Explosive limit - lower (%)	1.1 % estimated
Explosive limit - upper (%)	6 % estimated
Vapor pressure	65.73 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	784.4 °F (418 °C) estimated
Decomposition temperature	Not available.
Viscosity	Not available.
Other information	
Density	0.69868 g/cm3 estimated
Explosive properties	Not explosive.
Flammability class	Flammable IB estimated
Oxidizing properties	Not oxidizing.
Specific gravity	0.7 estimated

10. Stability and reactivity

Reactivity	The product is stable and non-reactive under normal conditions of use, storage and transport.
Chemical stability	Material is stable under normal conditions.
Possibility of hazardous reactions	Hazardous polymerization does not occur.
Conditions to avoid	Avoid heat, sparks, open flames and other ignition sources. Avoid temperatures exceeding the flash point. Contact with incompatible materials.
Incompatible materials	Strong oxidizing agents.
Hazardous decomposition products	No hazardous decomposition products are known.

11. Toxicological information

Information on likely routes of exposure

Inhalation	May cause drowsiness or dizziness. Headache. Nausea, vomiting. Prolonged inhalation may be harmful.
Skin contact	Causes skin irritation.
Eye contact	Direct contact with eyes may cause temporary irritation.
Ingestion	Droplets of the product aspirated into the lungs through ingestion or vomiting may cause a serious chemical pneumonia.
Symptoms related to the physical, chemical and toxicological characteristics	Aspiration may cause pulmonary edema and pneumonitis. May cause drowsiness or dizziness. Headache. Nausea, vomiting. Skin irritation. May cause redness and pain.

Information on toxicological effects

Acute toxicity May be fatal if swallowed and enters airways.

Components	Species	Test Results
3,3',4,4',5,5'-Hexachlorobiphenyl (CAS 32774-16-6)		
Acute		
Oral		
LD50	Mouse	19 mg/kg
3,3',4,4'-Tetrachlorobiphenyl (CAS 32598-13-3)		
Acute		
Dermal		
LD50	Rabbit	8.65 g/kg
Oral		
LD50	Guinea pig	1 mg/kg
Isooctane (CAS 540-84-1)		
Acute		
Dermal		
LD50	Rabbit	> 2000 mg/kg, 24 Hours
Inhalation		
Vapor		
LC50	Rat	> 33.52 mg/l, 4 Hours
Oral		
LD50	Rat	> 5000 mg/kg

Skin corrosion/irritation	Causes skin irritation.
Serious eye damage/eye irritation	Direct contact with eyes may cause temporary irritation.

Respiratory or skin sensitization

Respiratory sensitization	Not a respiratory sensitizer.
Skin sensitization	This product is not expected to cause skin sensitization.
Germ cell mutagenicity	No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.
Carcinogenicity	Not classifiable as to carcinogenicity to humans.

IARC Monographs. Overall Evaluation of Carcinogenicity

3,3',4,4',5-Pentachlorobiphenyl (CAS 57465-28-8) 1 Carcinogenic to humans.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053)

Not listed.

US. National Toxicology Program (NTP) Report on Carcinogens

2,3,3',4,4',5,5'-Heptachlorobiphenyl (CAS 39635-31-9)	Reasonably Anticipated to be a Human Carcinogen.
2,3,3',4,4',5'-Hexachlorobiphenyl (CAS 69782-90-7)	Reasonably Anticipated to be a Human Carcinogen.
2,3,3',4,4',5-Hexachlorobiphenyl (CAS 38380-08-4)	Reasonably Anticipated to be a Human Carcinogen.
2,3,3',4,4'-Pentachlorobiphenyl (CAS 32598-14-4)	Reasonably Anticipated to be a Human Carcinogen.
2,3',4,4',5,5'-Hexachlorobiphenyl (CAS 52663-72-6)	Reasonably Anticipated to be a Human Carcinogen.
2,3,4,4',5-Pentachlorobiphenyl (CAS 74472-37-0)	Reasonably Anticipated to be a Human Carcinogen.

2,3',4,4',5-Pentachlorobiphenyl (CAS 31508-00-6)	Reasonably Anticipated to be a Human Carcinogen.
2',3,4,4',5-Pentachlorobiphenyl (CAS 65510-44-3)	Reasonably Anticipated to be a Human Carcinogen.
3,3',4,4',5,5'-Hexachlorobiphenyl (CAS 32774-16-6)	Reasonably Anticipated to be a Human Carcinogen.
3,3',4,4',5-Pentachlorobiphenyl (CAS 57465-28-8)	Reasonably Anticipated to be a Human Carcinogen.
3,3',4,4'-Tetrachlorobiphenyl (CAS 32598-13-3)	Reasonably Anticipated to be a Human Carcinogen.
3,4,4',5-Tetrachlorobiphenyl (CAS 70362-50-4)	Reasonably Anticipated to be a Human Carcinogen.

Reproductive toxicity This product is not expected to cause reproductive or developmental effects.

Specific target organ toxicity - single exposure May cause drowsiness or dizziness.

Specific target organ toxicity - repeated exposure Not classified.

Aspiration hazard May be fatal if swallowed and enters airways.

Chronic effects Prolonged inhalation may be harmful.

12. Ecological information

Ecotoxicity Very toxic to aquatic life with long lasting effects.

Components	Species	Test Results
3,3',4,4'-Tetrachlorobiphenyl (CAS 32598-13-3)		
Aquatic		
Acute		
Fish	LC50	Fathead minnow (Pimephales promelas) > 0.002 mg/l, 96 hours

Persistence and degradability No data is available on the degradability of any ingredients in the mixture.

Bioaccumulative potential

Partition coefficient n-octanol / water (log Kow)

3,3',4,4'-Tetrachlorobiphenyl	6.72
Isooctane	5.18

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 Dispose of this material and its container to hazardous or special waste collection point. Incinerate the material under controlled conditions in an approved incinerator. Do not incinerate sealed containers. Do not allow this material to drain into sewers/water supplies. Do not contaminate ponds, waterways or ditches with chemical or used container. If discarded, this product is considered a RCRA ignitable waste, D001. 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 D001: Waste Flammable material with a flash point <140 F
The waste code should be assigned in discussion between the user, the producer and the waste disposal company.

Waste from residues / unused products Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).

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

14. Transport information

DOT

UN number UN1262
UN proper shipping name Octanes, solution (Isooctane RQ = 1000 LBS), MARINE POLLUTANT
Transport hazard class(es)
Class 3
Subsidiary risk -
Label(s) 3
Packing group II

Environmental hazards	
Marine pollutant	Yes
Special precautions for user	Read safety instructions, SDS and emergency procedures before handling.
Special provisions	IB2, T4, TP1
Packaging exceptions	150
Packaging non bulk	202
Packaging bulk	242

IATA

UN number	UN1262
UN proper shipping name	Octanes solution (Isooctane)
Transport hazard class(es)	
Class	3
Subsidiary risk	-
Packing group	II
Environmental hazards	Yes
ERG Code	3H
Special precautions for user	Read safety instructions, SDS and emergency procedures before handling.
Other information	
Passenger and cargo aircraft	Allowed with restrictions.
Cargo aircraft only	Allowed with restrictions.

IMDG

UN number	UN1262
UN proper shipping name	OCTANES SOLUTION (Isooctane), MARINE POLLUTANT
Transport hazard class(es)	
Class	3
Subsidiary risk	-
Packing group	II
Environmental hazards	
Marine pollutant	Yes
EmS	F-E, S-E
Special precautions for user	Read safety instructions, SDS and emergency procedures before handling.
Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code	Not established.

DOT

IATA; IMDG

Marine pollutant

General information IMDG Regulated Marine Pollutant. DOT Regulated Marine Pollutant.

15. Regulatory information

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

Toxic Substances Control Act (TSCA) All components of the mixture on the TSCA 8(b) inventory are designated "active".

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

2,3,3',4,4',5,5'-Heptachlorobiphenyl (CAS 39635-31-9)	0.00005 % Annual Export Notification required.
2,3,3',4,4',5'-Hexachlorobiphenyl (CAS 69782-90-7)	0.00005 % Annual Export Notification required.
2,3,3',4,4',5-Hexachlorobiphenyl (CAS 38380-08-4)	0.00005 % Annual Export Notification required.
2,3,3',4,4'-Pentachlorobiphenyl (CAS 32598-14-4)	0.00005 % Annual Export Notification required.
2,3',4,4',5,5'-Hexachlorobiphenyl (CAS 52663-72-6)	0.00005 % Annual Export Notification required.
2,3,4,4',5-Pentachlorobiphenyl (CAS 74472-37-0)	0.00005 % Annual Export Notification required.
2,3',4,4',5-Pentachlorobiphenyl (CAS 31508-00-6)	0.00005 % Annual Export Notification required.
2',3,4,4',5-Pentachlorobiphenyl (CAS 65510-44-3)	0.00005 % Annual Export Notification required.
3,3',4,4',5,5'-Hexachlorobiphenyl (CAS 32774-16-6)	0.00005 % Annual Export Notification required.
3,3',4,4',5-Pentachlorobiphenyl (CAS 57465-28-8)	0.00005 % Annual Export Notification required.
3,3',4,4'-Tetrachlorobiphenyl (CAS 32598-13-3)	0.00005 % Annual Export Notification required.
3,4,4',5-Tetrachlorobiphenyl (CAS 70362-50-4)	0.00005 % Annual Export Notification required.

CERCLA Hazardous Substance List (40 CFR 302.4)

Isooctane (CAS 540-84-1) Listed.

SARA 304 Emergency release notification

Not regulated.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053)

Not listed.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

SARA 302 Extremely hazardous substance

Not listed.

SARA 311/312 Hazardous chemical Yes

Classified hazard categories
Flammable (gases, aerosols, liquids, or solids)
Skin corrosion or irritation
Specific target organ toxicity (single or repeated exposure)
Aspiration hazard
Hazard not otherwise classified (HNOC)

SARA 313 (TRI reporting)

Not regulated.

Other federal regulations

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

Isooctane (CAS 540-84-1)

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Not regulated.

Safe Drinking Water Act (SDWA) Contains component(s) regulated under the Safe Drinking Water Act.

US state regulations

US. California. Candidate Chemicals List. Safer Consumer Products Regulations (Cal. Code Regs, tit. 22, 69502.3, subd. (a))

2,3,3',4,4',5,5'-Heptachlorobiphenyl (CAS 39635-31-9)
2,3,3',4,4',5'-Hexachlorobiphenyl (CAS 69782-90-7)
2,3,3',4,4',5-Hexachlorobiphenyl (CAS 38380-08-4)
2,3,3',4,4'-Pentachlorobiphenyl (CAS 32598-14-4)
2,3',4,4',5,5'-Hexachlorobiphenyl (CAS 52663-72-6)
2,3,4,4',5-Pentachlorobiphenyl (CAS 74472-37-0)
2,3',4,4',5-Pentachlorobiphenyl (CAS 31508-00-6)
2',3,4,4',5-Pentachlorobiphenyl (CAS 65510-44-3)
3,3',4,4',5,5'-Hexachlorobiphenyl (CAS 32774-16-6)
3,3',4,4',5-Pentachlorobiphenyl (CAS 57465-28-8)
3,3',4,4'-Tetrachlorobiphenyl (CAS 32598-13-3)
3,4,4',5-Tetrachlorobiphenyl (CAS 70362-50-4)
Isooctane (CAS 540-84-1)

California Proposition 65

WARNING: This product can expose you to chemicals including 2,3,3',4,4'-Pentachlorobiphenyl, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

California Proposition 65 - CRT: Listed date/Carcinogenic substance

2,3,3',4,4',5'-Hexachlorobiphenyl (CAS 69782-90-7)	Listed: October 1, 1989
2,3,3',4,4',5-Hexachlorobiphenyl (CAS 38380-08-4)	Listed: October 1, 1989
2,3,3',4,4'-Pentachlorobiphenyl (CAS 32598-14-4)	Listed: October 1, 1989
2,3',4,4',5,5'-Hexachlorobiphenyl (CAS 52663-72-6)	Listed: October 1, 1989
2,3,4,4',5-Pentachlorobiphenyl (CAS 74472-37-0)	Listed: October 1, 1989
2,3',4,4',5-Pentachlorobiphenyl (CAS 31508-00-6)	Listed: October 1, 1989
2',3,4,4',5-Pentachlorobiphenyl (CAS 65510-44-3)	Listed: October 1, 1989
3,3',4,4',5,5'-Hexachlorobiphenyl (CAS 32774-16-6)	Listed: October 1, 1989
3,3',4,4',5-Pentachlorobiphenyl (CAS 57465-28-8)	Listed: October 1, 1989
3,3',4,4'-Tetrachlorobiphenyl (CAS 32598-13-3)	Listed: October 1, 1989
3,4,4',5-Tetrachlorobiphenyl (CAS 70362-50-4)	Listed: October 1, 1989

California Proposition 65 - CRT: Listed date/Developmental toxin

2,3,3',4,4',5,5'-Heptachlorobiphenyl (CAS 39635-31-9)	Listed: January 1, 1991
2,3,3',4,4',5'-Hexachlorobiphenyl (CAS 69782-90-7)	Listed: January 1, 1991
2,3,3',4,4',5-Hexachlorobiphenyl (CAS 38380-08-4)	Listed: January 1, 1991
2,3,3',4,4'-Pentachlorobiphenyl (CAS 32598-14-4)	Listed: January 1, 1991
2,3',4,4',5,5'-Hexachlorobiphenyl (CAS 52663-72-6)	Listed: January 1, 1991
2,3,4,4',5-Pentachlorobiphenyl (CAS 74472-37-0)	Listed: January 1, 1991
2,3',4,4',5-Pentachlorobiphenyl (CAS 31508-00-6)	Listed: January 1, 1991
2',3,4,4',5-Pentachlorobiphenyl (CAS 65510-44-3)	Listed: January 1, 1991
3,3',4,4',5,5'-Hexachlorobiphenyl (CAS 32774-16-6)	Listed: January 1, 1991
3,3',4,4',5-Pentachlorobiphenyl (CAS 57465-28-8)	Listed: January 1, 1991
3,3',4,4'-Tetrachlorobiphenyl (CAS 32598-13-3)	Listed: January 1, 1991
3,4,4',5-Tetrachlorobiphenyl (CAS 70362-50-4)	Listed: January 1, 1991

International Inventories

Country(s) or region	Inventory name	On inventory (yes/no)*
Australia	Australian Inventory of Industrial Chemicals (AICIS)	Yes
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No
China	Inventory of Existing Chemical Substances in China (IECSC)	Yes
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)	Yes
New Zealand	New Zealand Inventory	No
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	No

Country(s) or region	Inventory name	On inventory (yes/no)*
Taiwan	Taiwan Chemical Substance Inventory (TCSI)	Yes
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

*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 07-15-2022

Revision date 07-15-2022

Version # 02

NFPA ratings Health: 2
Flammability: 3
Instability: 0

Disclaimer

Chem Service, Inc. cannot anticipate all conditions under which this information and its product, or the products of other manufacturers in combination with its product, may be used. It is the user's responsibility to ensure safe conditions for handling, storage and disposal of the product, and to assume liability for loss, injury, damage or expense due to improper use. 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.

Persons not specifically and properly trained should not handle this chemical or its container. This product is furnished FOR LABORATORY USE ONLY! Our products may NOT BE USED as drugs, cosmetics, agricultural or pesticide products, food additives or as household chemicals.

This Safety Data Sheet (SDS) is intended only for use with Chem Service, Inc. products and should not be relied on for use with materials from any other supplier even if the chemical name(s) on the product are identical! Whenever using an SDS for a solution or mixture the user should refer to the SDS for every component of the solution or mixture. Chem Service warrants that this SDS is based upon the most current information available to Chem Service at the time it was last revised. THIS WARRANTY IS EXCLUSIVE, AND CHEM SERVICE, INC. MAKES NO OTHER WARRANTY, EXPRESSED OR IMPLIED, INCLUDING ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR PURPOSE. This SDS is provided gratis and CHEM SERVICE, INC. SHALL NOT BE LIABLE FOR ANY INCIDENTAL, CONSEQUENTIAL OR CONTINGENT DAMAGES.

Copyright © 2000-2014 Chem Service, Inc. All rights reserved except that this SDS may be printed for the use of a customer or prospective customer of Chem Service, Inc provided the entire SDS is printed. The SDS may not be placed in any database or otherwise stored or distributed in electronic or any other form.

This product is furnished FOR LABORATORY USE ONLY.