

**Contaminants Registered as part of existing
 Foundries - Industry Standard Approval Registration No. 102-13-393-rv0
 for The Hopper Foundry (1977) Ltd. in Forest, ON**

Suspended Particulate Matter

Contaminant Name	C.A.S. #	Contaminant Name	C.A.S. #
Aluminum [And Other Compounds]	7429-90-5	Nickel And Nickel Compounds	7440-02-0
Antimony [And Other Compounds]	7440-36-0	Nitrates	14797-55-8
Arsenic And Compounds	7440-38-2	Organic Carbon	Not Available
Barium [And Other Compounds]	7440-39-3	Palladium [And Other Compounds]	7440-05-3
Beryllium And Compounds	7440-41-7	Phosphorus	7723-14-0
Bromine	7726-95-6	Platinum [And Other Compounds]	7440-06-4
Boron	7440-42-8	Potassium [And Other Compounds]	7440-09-7
Cadmium And Cadmium Compounds	7440-43-9	Rhodium [And Other Compounds]	7440-16-6
Calcium [And Other Compounds]	7440-70-2	Rubidium [And Other Compounds]	7440-17-7
Carbon	7440-44-0	Selenium [And Other Compounds]	7782-49-2
Chlorine	7782-50-5	Silica - Respirable (<10 µm Diameter), Quartz	14808-60-7
Chromium And Chromium Compounds (Metallic, Divalent And Trivalent)	7440-47-3	Silicon	36 7440-21-330194, 12597-37-40
Chromium Compounds (Hexavalent)	7440-47-3	Silver [And Other Compounds]	7440-22-4
Cobalt [And Other Compounds]	7440-48-4	Sodium [And Other Compounds]	7440-23-5
Copper [And Other Compounds]	7440-50-8	Strontium [And Other Compounds]	7440-24-6
Gallium [And Other Compounds]	7440-55-3	Sulphates	Not Available
Indium [And Other Compounds]	7440-74-6	Sulphur, Elemental	7704-34-9
Iron [And Other Compounds]	7439-89-6	Suspended Particulate Matter (< 44 µm Diameter)	Not Applicable
Lanthanum	7439-91-0	Thallium [And Other Compounds]	7440-28-0
Lead And Lead Compounds	7439-92-1	Tin [And Other Compounds]	7440-31-5
Magnesium Magnesium [And Other Compounds] (excluding Magnesium Carbonate, Magnesium Chloride, Magnesium Oxide, and Magnesium Stearate)	7439-95-4	Titanium [And Other Compounds]	7440-32-6
Manganese And Manganese Compounds	7439-96-5	Vanadium [And Other Compounds]	7440-62-2
Mercury Mercury (As Hg) – Alkyl Compounds	7439-97-6	Yttrium [And Other Compounds]	7440-65-5
Mercury (Hg) [And Other Compounds]	7439-97-6	Zinc [And Other Compounds]	7440-66-6
Molybdenum [And Other Compounds]	7439-98-7	Zirconium [And Other Compounds]	7440-67-7

Volatile Organic Compounds

Contaminant Name	C.A.S. #	Contaminant Name	C.A.S. #
Naphthalene, 1,3-Dimethyl-	575-41-7	Dibenzofuran	132-64-9
Naphthalene, 1,4-Dimethyl-	571-58-4	Ethanol (Ethyl Alcohol)	64-17-5
Naphthalene, 1,8-Dimethyl-	569-41-5	Ethylbenzene	100-41-4
1-Methylnaphthalene	90-12-0	Fluoranthene - As B[A]P	206-44-0
Naphthalene, 1,6,7-Trimethyl-	2245-38-7	Formaldehyde	50-00-0
Naphthalene, 2,3-Dimethyl-	581-40-8	Furfuryl Alcohol	98-00-0
Naphthalene, 2,6-Dimethyl-	581-42-0	Hydrogen Cyanide	74-90-8
Naphthalene, 2,7-Dimethyl-	582-16-1	Hydrogen Sulphide	7783-06-4
2-Methylnaphthalene	91-57-6	Indeno(1,2,3-Cd)Pyrene - As B[A]P	193-39-5
Methylene Dianiline	101-77-9	Methanol (Methyl Alcohol)	67-56-1
Acenaphthylene - As B[A]P	208-96-8	Methane Diphenyl Diisocyanate (Mdi Monomer)	101-68-8
Acetaldehyde	75-07-0	Naphthalene	91-20-3

Contaminant Name	C.A.S. #	Contaminant Name	C.A.S. #
Acetophenone	98-86-2	Hexane, N- (N-Hexane And Hexane Isomers Only)	110-54-3
Acrolein	107-02-8	Hexane, N- (Part Of A Mixture)	110-54-3
Ammonia	7664-41-7	Nitrobenzene	98-95-3
Aniline	62-53-3	Perylene	198-55-0
Anthranthrene - As B[A]P	191-26-4	Phenanthrene - As B[A]P	85-01-8
Anthracene - As B[A]P	120-12-7	Phenol	108-95-2
Benzene	71-43-2	Phenyl isocyanate	103-71-9
Benzo(A)Anthracene - As B[A]P	56-55-3	Propionaldehyde	123-38-6
Benzo(A)Fluoranthene - As B[A]P	203-33-8	Pyrene - As B[A]P	129-00-0
Benzo(A)Pyrene	50-32-8	Styrene	100-42-5
Benzo(B)+(K)Fluoranthene – As B[A]P	205-99-2, 207-08-9	Toluene	108-88-3
Benzo(B)Fluoranthene – As B[A]P	205-99-2	Total Aldehydes (C2-C25)	Not Applicable
Benzo(E)Pyrene - As B[A]P	192-97-2	Total Amines	Not Applicable
Benzo(G,H,I)Perylene - As B[A]P	191-24-2	Trimethylbenzene, 1,2,4- (Individual Isomer Or Trimethylbenzene Mixture)	95-63-6
Benzo(K)Fluoranthene – As B[A]P	207-08-9	Trimethylsilyl Fluoride	420-56-4
Chrysene - As B[A]P	218-01-9	M-xylene	108-38-3
Orthocresol	95-48-7	P-Xylene	106-42-3
Isopropyl Benzene	98-82-8	O-xylene	95-47-6
Dibenz(A,H)Anthracene – As B[A]P	53-70-3	Xylenes	1330-20-7
Dibenzo(A,H)+(A,C) Anthracene - As B[A]P	53-70-3, 215-58-7		

Other

Contaminant Name	C.A.S. #
Sulphur Dioxide	7446-09-5

Contaminants Requested (as per September 18, 2019 Application) to be added to existing Foundries - Industry Standard Approval Registration No. 102-13-393-rv0 for The Hopper Foundry (1977) Ltd. in Forest, ON

Suspended Particulate Matter

Contaminant Name	C.A.S. #	Contaminant Name	C.A.S. #
2-Propanamine, N,N-Dimethyl-	996-35-0	Neodymium [And Other Compounds]	7440-00-8
2-Propenoic Acid, Polymer With Ethyl 2-Propenoate And Isooctyl 2-Propenoate	68540-66-9	Niobium [And Other Compounds]	7440-03-1
Aluminum Oxide	1344-28-1	Oxirane, 2,2'-[(1-Methylethylidene) Bis(4,1-Phenyleneoxymethylene)]Bis-, Homopolymer	25085-99-8
Aluminum Tristearate	637-12-7	Phenol-Formaldehyde Resin	9003-35-4
Barium Chloride (BaCl ₂)	10361-37-2	Pigment Blue 15	147-14-8
Bentonite	1302-78-9	Poly(Difluoromethylene), A-(Cyclohexylmethyl)-Ω-Hydro-	65530-85-0
Benzene, 1-Isocyanato-2-[(4-Isocyanatophenyl)Methyl]-	5873-54-1	Polydimethylsiloxanes	63148-62-9
Bismuth [And Other Compounds]	7440-69-9	Potassium Chloride (KCl)	7447-40-7
Borate(1-), Tetrafluoro-, Potassium	14075-53-7	Potassium Cyanide	151-50-8
Borax	1303-96-4	Potassium Hydroxide	1310-58-3
c.i. Pigment Green 7	1328-53-6	Potassium Nitrate	7757-79-1
Calcium Carbide	75-20-7	Potassium Oxide (K ₂ O)	12136-45-7
Calcium Carbonate	471-34-1	Quaternary Ammonium Compounds, Benzyl(Hydrogenated Tallow Alkyl)Dimethyl, Chlorides, Compds. With Hectorite	71011-26-2
Calcium Chloride Anhydrous	10043-52-4	Resorcinol	108-46-3
Calcium Cyanide (As Total Salt)	592-01-8	Rosin	8050-09-7
Calcium Fluoride (CaF ₂)	7789-75-5	Scandium [And Other Compounds]	7440-20-2
Calcium Hydroxide	1305-62-0	Silica - Respirable (<10 µm Diameter), Cristabolite	14464-46-1
Calcium Oxide	1305-78-8	Silicate(2-), Hexafluoro-, Disodium	16893-85-9
Calcium Stearate	1592-23-0	Silicic Acid, Potassium Salt	1312-76-1
Carbon Black	1333-86-4	Silicic Acid, Sodium Salt	1344-09-8
Coke (Coal)	65996-77-2	Silicon Dioxide	7631-86-9
Cumene Hydroperoxide	80-15-9	Sodium Carbonate	497-19-8
Decanedioic Acid, Bis(1,2,2,6,6-Pentamethyl-4- Piperidinyl) Ester	41556-26-7	Sodium Hydroxide	1310-73-2
Ferric Oxide	1309-37-1	Sodium Monoxide	12401-86-4
Graphite	7782-42-5	Sodium Nitrate	7631-99-4
Hdi Polyisocyanate (Hdi-Bt & Hdi-Ic)	28182-81-2	Sodium Oxide (Na ₂ O)	1313-59-3
Hexamethylene Diisocyanate (Hdi) Monomer	822-06-0	Sodium Tetraborate	1330-43-4
Hydrated Silica	112926-00-8	Strontium Hydroxide	18480-07-4
Iron ion, Fe+2	15438-31-0	Strontium Oxide	1314-11-0
Iron Oxide (Fe ₃ O ₄)	1317-61-9	Synthetic Amorphous Silica	112945-52-5
Magnesium Carbonate	546-93-0	Talc - Fibrous	14807-96-6
Magnesium Chloride	7786-30-3	Tantalum [And Other Compounds]	7440-25-7
Magnesium Oxide	1309-48-4	Titanium Dioxide	13463-67-7
Magnesium Stearate	557-04-0	Zinc Chloride	7646-85-7
Mica	12001-26-2	Zinc Stearate	557-05-1
Mullite (Al ₆ O ₅ (SiO ₄) ₂)	1302-93-8	Zircon (Zr(SiO ₄))	14940-68-2
N-(3-Trimethoxysilylpropyl)-Ethylenediamine	1760-24-3	Zirconium Oxide (ZrO ₂)	1314-23-4
Naphtha (Petroleum), Light Steam-Cracked Arom., C5-12 Cycloalkadiene Fraction, Polymers	68527-24-2		

Volatile Organic Compounds

Contaminant Name	C.A.S. #	Contaminant Name	C.A.S. #
1,2,4,5-Tetramethylbenzene	95-93-2	Indane	496-11-7
1,3-Propanediamine, N,N-Bis[3-(Dimethylamino)Propyl]-N',N'-Dimethyl-	33329-35-0	Isobutyl Acetate	110-19-0
1-Methylimidazole	616-47-7	Isophorone Diisocyanate	4098-71-9
1-Tetradecene	1120-36-1	Isopropanol (Isopropyl Alcohol)	67-63-0
2,4,6-Tris(Dimethylaminomethyl)Phenol	90-72-2	Kerosine (Petroleum)	8008-20-6
2-Phenylisopropanol	617-94-7	Kerosine (Petroleum), Hydrodesulfurized	64742-81-0
2-Propenamide, N,N'-Methylenebis-	110-26-9	Ligroine	8032-32-4
Acetic Acid	64-19-7	Liquid Petroleum Gas	68476-85-7
Acetone	67-64-1	Methane	74-82-8
Acridine	260-94-6	Methoxy-1-Propyl Acetate, 2-	70657-70-4
Acrylic Acid	79-10-7	Methyl Ethyl Ketone (2-Butanone)	78-93-3
Alcohols, C12-15, Ethoxylated Propoxylated	68551-13-3	Methyl Ethyl Ketone Peroxide	1338-23-4
Aromatic Hydrocarbons, C9-11	70693-06-0	Methyl Formate	107-31-3
Aromatic Naphtha, Type I	64742-95-6	Methyl Isobutyl Ketone	108-10-1
Benzene, 1,1'-Methylenebis(Isocyanato-	26447-40-5	Methyl Propyl Ketone	107-87-9
Benzene, 1,2,3,5-Tetramethyl-	527-53-7	Methyl-2-Pyrrolidone, N-	872-50-4
Benzene, 1,3-Diethyl-	141-93-5	Methylene Bis(4-Cyclohexylisocyanate)	5124-30-1
Benzene, 1,4-Diethyl-	105-05-5	Mineral Spirits	See definition in O.Reg. 419/05
Benzenesulfonic Acid, 4-Methyl-	104-15-4	Naphtha (Petroleum), Heavy Alkylate	64741-65-7
Benzenesulfonic Acid, Dimethyl-	25321-41-9	Naphtha (Petroleum), Hydrodesulfurized Heavy	64742-82-1
Butane	106-97-8	Naphtha (Petroleum), Hydrotreated Heavy	64742-48-9
Butyl Acetate, N-	123-86-4	Naphtha (Petroleum), Hydrotreated Light	64742-49-0
Carbazole	86-74-8	Oxo-Heptyl Acetate	90438-79-2
Cresols	1319-77-3	Petroleum Ether	8030-30-6
Dibutyl Phthalate (Dbp, Di-N-Butyl Phthalate)	84-74-2	Petroleum Gases, Liquefied, Sweetened	68476-86-8
Diethylbenzene	25340-17-4	Poly[Oxy(Methyl-1,2-Ethanedyl)], A-Hydro-Ω- Hydroxy-, Ether With 2-Ethyl-2-(Hydroxymethyl)-1,3-Propanediol (3:1)	25723-16-4
Diethylene Glycol	111-46-6	Polyethylene Glycol Nonylphenyl Ether	9016-45-9
Diethylene Glycol Monobutyl Ether	112-34-5	Polymeric Methane Diphenyl Diisocyanate (Pmdi)	9016-87-9
Diisobutyl Phthalate	84-69-5	Propane	74-98-6
Diisononyl Phthalate	28553-12-0	Propylene Glycol Monomethyl Ether Acetate	108-65-6
Dimethyl Glutarate	1119-40-0	Pyridine, 4-(3-Phenylpropyl)-	2057-49-0
Dimethyl Phthalate (Dmp)	131-11-3	Siloxanes And Silicones, Di-Me, [[[3-[(2- Aminoethyl)Amino] Propyl]Dimethoxysilyl]Oxy]-Terminated	71750-80-6
Dimethyl Succinate	106-65-0	Siloxanes And Silicones, Di-Me, Polymers With Me Silsesquioxanes, Hydroxy-Terminated	68554-67-6
Distillates (Petroleum), Hydrotreated Light	64742-47-8	Solvent Naphtha (Petroleum), Heavy Aliphatic	64742-96-7
Distillates (Petroleum), Straight-Run Middle	64741-44-2	Solvent Naphtha (Petroleum), Heavy Aromatic	64742-94-5

Contaminant Name	C.A.S. #	Contaminant Name	C.A.S. #
Ethyl Acetate	141-78-6	Solvent Naphtha (Petroleum), Light Aliph.	64742-89-8
Ethyl-3-Ethoxy Propionate	763-69-9	Solvent Naphtha (Petroleum), Medium Aliph.	64742-88-7
Ethylene	74-85-1	Stoddard Solvent	8052-41-3
Ethylene Glycol Butyl Ether (Butyl Cellosolve)	111-76-2	Tergitol 15-S-4	68131-40-8
Ethylene Glycol Diacetate	111-55-7	Triacetin	102-76-1
Ethylene Glycol Monophenyl Ether	122-99-6	Trichloroethylene (Tce)	79-01-6
Formic Acid	64-18-6	Triethylamine	121-44-8
Gamma-Butyrolactone	96-48-0	Triethylene Glycol	112-27-6
Heptane, N-	142-82-5	Trimethylbenzene, 1,2,3- (Individual Isomer Or Trimethylbenzene Mixture)	526-73-8
Hexachlorobenzene	118-74-1	Trimethylbenzene, 1,3,5- (Individual Isomer Or Trimethylbenzene Mixture)	108-67-8
Hexanedioic Acid, Dimethyl Ester	627-93-0	Trimethylolpropane Triacrylate	15625-89-5

Other Contaminants Requested

Contaminant Name	C.A.S. #	Contaminant Name	C.A.S. #
Argon	7440-37-1	Light Oil (Coal), Coke Oven, Distn. Residues	68920-61-6
Benzoic Acid, 2-Hydroxy-	69-72-7	Linseed Oil	8001-26-1
Boric Acid	10043-35-3	Linseed Oil, Polymd.	67746-08-1
Carbon Monoxide	630-08-0	Nitrogen	7727-37-9
Coal Dust (Anthracite, Bituminous, Lignite & Seacoal)	-	Nitrogen Oxide (NO)	10102-43-9
Di-(2-Ethylhexyl) Adipate	103-23-1	Nitrogen Oxides	10102-44-0
Fatty Acids, Tall-Oil, Bu Esters	67762-63-4	Nitrous Oxide	10024-97-2
Fluorides (As HF) – Gaseous (Growing Season)	7664-39-3	Oxalic Acid	144-62-7
Fluorides (As HF) – Total (Growing Season)	7664-39-3	Phosphoric Acid	7664-38-2
Fluorides (As HF) – Total (Non-Growing Season)	7664-39-3	Poly(Oxy-1,2-Ethanedyl), A-Sulfo-Ω-(Dodecyloxy)-, Sodium Salt	9004-82-4
Hydrogen Chloride	7647-01-0	Rape Oil, Me Ester	73891-99-3
Hydrogen Peroxide	7722-84-1	Sulphuric Acid	7664-93-9