Tar Decanter Sludge

Safety Data Sheet (SDS)

Section 1 – Identification

1(a) Product Identifier Used on Label: Tar Decanter Sludge

1(b) Other Means of Identification: None

1(c) Recommended Use of the Chemical and Restrictions on Use: Beneficial reuse; none known

1(d) Name, Address, and Telephone Number:

Stelco Inc.
386 Wilcox Street
Hamilton, ON L8L 8K5
Phone number: (905) 528-2511 (8:00 am to 5:00 pm)

1(e) Emergency Phone Number: 1-888-CAN-UTEC (226-8832) or 613-996-6666

Section 2 – Hazard(s) Identification

2(a) Classification of the Chemical: Tar Decanter Sludge is considered a hazardous material according to the criteria specified in REACH [REGULATION (EC) No 1907/2006], CLP [REGULATION (EC) No 1272/2008], OSHA 29 CFR 1910.1200 Hazard Communication Standard and the Canadian Hazardous Products Regulations. The categories of Health Hazards as defined in "GLOBALLY HARMONIZED SYSTEM OF CLASSIFICATION AND LABELLING OF CHEMICALS (GHS), have been evaluated. Refer to Section 3, 8 and 11 for additional information.

2(b) Signal Word, Hazard Statement(s), Symbols and Precautionary Statement(s):

Hazard Symbol	Hazard Classification	Signal Word	Hazard Statement(s)	Precautionary Statement(s)
	Germ Cell Mutagenicity - 1B Carcinogenicity - 1A Reproductive Toxicity - 1B	**Danger**	May cause an allergic skin reaction. May cause genetic defects, cancer and damage fertility or the unborn child.	Wear protective gloves/protective clothing/eye protection/face protection. Avoid breathing/gas/mist/vapours/spray. Obtain, read and follow all safety instructions before use. Contaminated work clothing should not be allowed out of the workplace. If exposed or concerned: Get medical advice. If on skin: Take off contaminated clothing. Wash with plenty of water. If skin irritation or rash occurs: Get medical help. Wash contaminated clothing before reuse. Store locked up. Dispose of contents in accordance with federal, provincial, state and local regulations.
	Skin Sensitization - 1			

2(c) Hazards Not Otherwise Classified: None Known

2(d) Unknown Acute Toxicity Statement (mixture): None Known

Section 3 – Composition/Information on Ingredients

3(a-c) Chemical Name, Common Name (Synonyms), CAS Number and Other Identifiers, and Concentration:

Chemical Name	CAS Number	EC Number	% weight
Coal Tar	65996-93-2	266-028-2	40-81
Carbon	7440-44-0	231-153-3	<25
Ash	Mixture	Mixture	<3
Water	7732-18-5	231-791-2	<36
Sulphur	7704-34-9	231-722-6	1

EC- European Community
CAS- Chemical Abstract Service

Section 4 – First-aid Measures

4(a) Description of Necessary Measures: If exposed, concerned or feel unwell: Get medical advice/attention.

- **Inhalation:** Remove person to fresh air and keep comfortable for breathing.
- **Eye Contact:** Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
- **Skin Contact:** Wash with plenty of water If skin irritation or rash occurs: Get medical advice/attention. Wash contaminated clothing before reuse.
- **Ingestion:** Seek medical attention. Do NOT induce vomiting.

4(b) Most Important Symptoms/Effects, Acute and Delayed (Chronic):

Acute effects:

- **Inhalation:** Acute respiratory effects caused by overexposure to coal tar may include coughing, sneezing, and swollen or irritated nasal mucosa and sinuses. Short-term exposures may also cause transient photosensitization.
- **Eye:** Vapors or mist may cause irritation to the eyes and mucous membranes.
- **Skin:** Exposure to crude coal tar can cause skin irritation characterized by skin itching, burning, swelling and redness. Phototoxic reactions may occur following exposure to sunlight or ultraviolet light.
- **Ingestion:** Ingestion of this product is unlikely. However, gastrointestinal disturbances (i.e., nausea and vomiting) and systemic toxicity may occur if absorbed. Ingestion of this material may cause irritation to the mouth, throat and gastrointestinal tract.

Chronic Effects:

- May cause genetic defects and damage fertility or the unborn child. Harmful if inhaled or absorbed through the skin. Phototoxic. May cause allergic skin reactions and eye and skin irritation. Repeated excessive exposures may cause blood disorders such as anemia and leukemia. Repeated excessive exposures may cause liver and/or kidney effects or damage. Material has been related to cancer in humans.

4(c) Immediate Medical Attention and Special Treatment: If exposed or concerned: Get medical advice/attention.

Section 5 – Fire-fighting Measures

5(a) Suitable (and unsuitable) Extinguishing Media: In case of fire: Use steam, water fog, foam, dry powder of carbon dioxide for extinction. Do not use a solid stream of water as it may scatter and spread the fire.

5(b) Specific Hazards Arising from the Chemical: When burned, toxic smoke and vapor may be emitted including, oxides of carbon and sulphur, polynuclear aromatic compounds (PNAs), aromatic hydrocarbons and other toxic vapors.

5(c) Special Protective Equipment and Precautions for Fire-fighters: Self-contained NIOSH-approved respiratory protection and full protective clothing should be worn when fumes and/or smoke from fire are present. Heat and flames cause emittance of acrid smoke and fumes. Do not release runoff from fire control methods to sewers or waterways. Firefighters should wear full face-piece self-contained breathing apparatus and chemical protective clothing with thermal protection. Direct water stream will scatter and spread flames and, therefore, should not be used.

Section 6 - Accidental Release Measures

6(a) Personal Precautions, Protective Equipment and Emergency Procedures: For spills, clean-up personnel should be protected against contact. Large spills should be diked, and foam applied. Do not release into sewers or waterways. Use absorbent material such as vermiculite or sand to soak up spill. Contain material and follow normal clean-up procedures. K e e p unnecessary people away. Isolate hazard area and deny entry. Stay upwind.

6(b) Methods and Materials for Containment and Clean Up: Collect material in appropriate, labeled containers for recovery or disposal in accordance with federal, provincial, state, and local regulations. Follow applicable regulations (e.g. 29 CFR 1910.120) and all other pertinent federal, provincial, state, and local requirements.

Section 7 - Handling and Storage

7(a) Precautions for Safe Handling: Contaminated work clothing must not be allowed out of the workplace. Wear protective gloves/protective clothing/eye protection/face protection. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Avoid direct contact on skin, eyes or on clothing. Emergency safety showers and eye wash stations should be present.

7(b) Conditions for Safe Storage, including any Incompatibilities: Store locked up.

Section 8 - Exposure Controls/Personal Protection

8(a) Occupational Exposure Limits (OELs): The following exposure limits are offered as reference, for an experienced industrial hygienist to review.

Ingredients	Ontario TWA[1]	ACGIH TLV[2]	OSHA PEL[3]	NIOSH REL[4]	IDLH[5]
Coal Tar	0.2 mg/m³ (as benzene soluble aerosol for coal tar pitch volatiles)	0.2 mg/m³ (as benzene soluble aerosol for coal tar pitch volatiles)	0.2 mg/m³ (benzene soluble fraction)	0.1 mg/m³ (cyclohexane-extractable fraction)	80 mg/m³
Carbon	10 mg/m³ (as inhalable fraction[6], PNOS[8]) 3.0 mg/m³ (as respirable fraction[7], PNOS[8])	10 mg/m³ (as inhalable fraction[6], PNOS[8]) 3.0 mg/m³ (as respirable fraction[7], PNOS)	15 mg/m³ (as total dust, PNOR)[9] 5.0 mg/m³ (as respirable fraction, PNOR)	NE	NE
Sulphur	10 mg/m³ (as inhalable fraction[6], PNOS[8]) 3.0 mg/m³ (as respirable fraction[7], PNOS[8])	10 mg/m³ (as inhalable fraction[6], PNOS[8]) 3.0 mg/m³ (as respirable fraction[6], PNOS[8])	15 mg/m³ (total dust, PNOR) 5.0 mg/m³ (as respirable fraction, PNOR	NE	NE

NE - None Established

1. Time-Weighted Average (TWA) limits established by the Ontario Ministry of Labour are 8-hour TWA concentrations unless otherwise noted.
2. Threshold Limit Values (TLV) established by the American Conference of Governmental Industrial Hygienists (ACGIH) are 8-hour TWA concentrations unless otherwise noted. ACGIH TLVs are for guideline purposes only and as such are not legal, regulatory limits for compliance purposes.
3. OSHA PELs (Permissible Exposure Limits) are 8-hour TWA (Time-Weighted Average) concentrations unless otherwise noted.
4. The National Institute for Occupational Safety and Health Recommended Exposure Limits (NIOSH-REL) Compendium of Policy and Statements. NIOSH, Cincinnati, OH (1992). NIOSH is the U.S. federal agency designated to conduct research relative to occupational safety and health. As is the case with ACGIH TLVs, NIOSH RELs are for guideline purposes only and as such are not legal, regulatory limits for compliance purposes.
5. The "immediately dangerous to life or health air concentration values (IDLHs)" are used by NIOSH as part of the respirator selection criteria and were first developed in the mid-1970's by NIOSH. The Documentation for Immediately Dangerous to Life or Health Concentrations (IDLHs) is a compilation of the rationale and sources of information used by NIOSH during the original determination of 387 IDLHs and their subsequent review and revision in 1994.
6. Inhalable fraction. The concentration of inhalable particulate for the application of this TLV is to be determined from the fraction passing a size-selector with the characteristics defined in the ACGIH TLVs® and BEIs® based on the Documentation of the Threshold Limit Values for Chemical Substances and Physical Agents & Biological Exposure Indices – as cited by Ministry of Labour (MOL) R.R.O. 833/90.
7. Respirable fraction. The concentration of respirable particulate for the application of this TLV is to be determined from the fraction passing a size-selector with the characteristics defined in the ACGIH TLVs® and BEIs® based on the Documentation of the Threshold Limit Values for Chemical Substances and Physical Agents & Biological Exposure Indices – as cited by Ministry of Labour (MOL) R.R.O. 833/90.
8. PNOS. Particles (Insoluble or Poorly Soluble) Not Otherwise Specified defined in the ACGIH TLVs® and BEIs® based on the Documentation of the Threshold Limit Values for Chemical Substances and Physical Agents & Biological Exposure Indices – as cited by Ministry of Labour (MOL) R.R.O. 833/90.
9. PNOR (Particulates Not Otherwise Regulated). All inert or nuisance dusts, whether mineral, inorganic, or organic, not listed specifically by substance name are covered by a limit which is the same as the inert or nuisance dust limit of 15 mg/m^3 for total dust and 5 mg/m^3 for the respirable fraction.

8(b) Appropriate Engineering Controls: Local exhaust ventilation should be used to control the emission of air contaminants. General dilution ventilation may assist with the reduction of air contaminant concentrations. Emergency eye wash stations and deluge safety showers should be available in the work area.

8(c) Individual Protection Measures:

- **Respiratory Protection**: Seek professional advice prior to respirator selection and use. In the US, follow OSHA respirator regulations (29 CFR 1910.134) and, if necessary, use only a NIOSH-approved respirator. In Ontario, follow CSA Standard Z94.4-11 "Selection Care and Use of Respirators" or the "NIOSH Guide to the Selection and Use of Particulate Respirators (1996)" for additional information. Select respirator based on its suitability to provide adequate worker protection for given working conditions, level of airborne contamination, and presence of sufficient oxygen. Concentration in air of the various contaminants determines the extent of respiratory protection needed. Half-face, negative-pressure, air-purifying respirator equipped with P100 filter is acceptable for concentrations up to 10 times the exposure limit. Full-face, negative-pressure, air-purifying respirator equipped with P100 filter is acceptable for concentrations up to 50 times the exposure limit. Protection by air-purifying negative-pressure and powered air respirators is limited. Use a positive-pressure-demand, full-face, supplied air respirator or self-contained breathing apparatus (SCBA) for concentrations above 50 times the exposure limit. If exposure is above the IDLH (immediately dangerous to life or health) for any of the constituents, or there is a possibility of an uncontrolled release or exposure levels are unknown, then use a positive-demand, full-face, supplied air respirator with escape bottle or SCBA.

  Warning! Air-purifying respirators both negative-pressure, and powered-air do not protect workers in oxygen-deficient atmospheres.
- **Eyes:** Wear appropriate eye protection to prevent eye contact. Use safety glasses with side shields or chemical goggles.
- **Skin:** Persons handling this product should wear appropriate clothing to prevent skin contact. Wear protective gloves.
- **Other Protective Equipment:** An eyewash fountain and deluge shower should be readily available in the work area.

Section 9 - Physical and Chemical Properties

9(a) Physical State: Solid/Liquid
9(b) Colour: Black, gritty, wet
9(b) Odour: Aromatic, naphthalene, ammonia
9(e) Melting Point/Freezing Point: NA
9(f) Initial Boiling Point and Boiling Range: >260 °C (>500 °F)
9(i) Flammability (solid, gas): NA
9(j) Upper/lower Flammability or Explosive Limits: NA
9(g) Flash Point: 200 °C (392 °F)
9(p) Auto-ignition Temperature: ND

9(q) Decomposition Temperature: ND
9(d) pH: 6-9
9(r) Kinematic Viscosity: ND
9(n) Solubility: NA
9(o) Partition Coefficient n-octanol/water: NA
9(l) Vapor Density (Air = 1): 2.2
9(m) Relative Density: 1.2 SG
9(k) Vapor Pressure: NA
9(r) Particle Characteristics: ND

NA - Not Applicable
ND - Not Determined for product as a whole

Section 10 - Stability and Reactivity

10(a) Reactivity: Not Determined (ND)
10(b) Chemical Stability: Tar Decanter Sludge is stable under normal storage and handling conditions.
10(c) Possibility of Hazardous Reaction: None Known
10(d) Conditions to Avoid: Storage with incompatible materials. Flames and ignition sources where dust can accumulate.
10(e) Incompatible Materials: Strong oxidants, sparks, open flames
10(f) Hazardous Decomposition Products: Oxides of carbon, sulphur, carbon black, and other toxic vapors may be releases at elevated temperatures.

Section 11 - Toxicological Information

11(a-d) Information on Toxicological Effects: The following toxicity data has been determined for **Tar Decanter Sludge** by using the information available for its components applied to the guidance on the preparation of an SDS under the GHS requirements of WHMIS, OSHA and the EU CPL:

Hazard Classifications	Hazard Category		Hazard Symbols	Signal Word	Hazard Statement
	EU	OSHA / WHMIS			
Skin Sensitization (covers Category 1)	1[a]	1[a]		**Warning**	May cause allergic skin reaction
Germ Cell Mutagenicity (covers Categories 1A, 1B and 2)	1B[b]	1B[b]		**Danger**	May cause genetic defects
Carcinogenicity (covers Categories 1A, 1B and 2)	1A[C]	1A[C]		**Danger**	May cause cancer
Reproductive Toxicity (covers Categories 1A, 1B and 2)	1B[d]	1B[d]		**Danger**	May damage fertility or the unborn child

11(a-d) Information on Toxicological Effects (continued):

The Toxicological data listed below are presented regardless to classification criteria. Individual hazard classification categories where the toxicological information has met or exceeded a classification criteria threshold are listed above.

a. No **Skin/Dermal Sensitization** data available for **Crude Coal Tar** as a mixture. The following **Skin/Dermal Sensitization** information was found for **the components:**
   - **Coal Tar:** Photosensitizing

b. No **Germ Cell Mutagenicity** data available for **Crude Coal Tar** as a mixture. The following **Germ Cell Mutagenicity** information was found for the components:
   - **Coal Tar** - Positive ames test, bacterial mutation

c. No **Carcinogenicity** data available for **Crude Coal Tar** as a mixture. The following **Carcinogenicity** information was found for the components:
   - **Coal Tar** - NTP has concluded that there is sufficient evidence that crude coal tars are carcinogenic in humans and experimental animals. Exposure to crude coal tars causes skin, lung, bladder and gastrointestinal cancers. This effect may be due to the presence of polycyclic aromatic hydrocarbons. OSHA (29 CFR 1910.1002) regulates coal tar pitch volatiles and ACGIH (2017 TLV Booklet) classifies coal tar pitch volatiles as confirmed human carcinogens. IARC lists coal tar as a Group 1 (i.e. human) carcinogen.

Section 11 - Toxicological Information (continued)

11(a-d) Information on Toxicological Effects (continued):

d. No **Reproductive Toxicity** data available for **Crude Coal Tar** as a mixture. The following **Reproductive Toxicity** information was found for the components:

- **Coal Tar:** Reproductive toxin based on REACH classification

The above toxicity information was determined from available scientific sources to illustrate the prevailing posture of the scientific community. The scientific resources includes: The American Conference of Governmental Industrial Hygienist (ACGIH) Documentation of the Threshold Limit Values (TLVs) and Biological Exposure indices (BEIs) with Other Worldwide Occupational Exposure Values 2017, The International Agency for Research on Cancer (IARC), The National Toxicology Program (NTP) updated documentation, the World Health Organization (WHO) and other available resources, the International Uniform Chemical Information Database (IUCLID), European Union Risk Assessment Report (EU-RAR), Concise International Chemical Assessment Documents (CICAD), European Union Scientific Committee for Occupational Exposure Limits (EU-SCOEL), Agency for Toxic Substances and Disease Registry (ATSDR), Hazardous Substance Data Bank (HSDB), and International Programme on Chemical Safety (IPCS).

The following health hazard information is provided regardless to classification criteria and is based on the individual component(s):

Acute Effects by component:

- **Benzene** - Excessive exposures may cause irritation to eyes, skin, nose, throat, lungs, and respiratory tract. Central nervous system effects may occur due to excessive exposures. Excessive exposures may result in headaches, nausea, sleep disturbances, excitability, loss of balance and coordination, unconsciousness, coma, respiratory failure, and death.
- **Toluene** - Excessive exposures may cause irritation to eyes, nose, throat, lungs, and respiratory tract. Central nervous system effects may occur. Excessive exposures may result in headaches, nausea dizziness, loss of balance and coordination, unconsciousness, and coma as well as respiratory failure and/or death.
- **Xylene** - Excessive exposures may cause irritation to eyes, nose, throat, lungs, and respiratory tract. Central nervous system effects may occur. May result in headaches, nausea, dizziness, loss of balance and coordination, unconsciousness, coma, respiratory failure and death. Repeated excessive exposures may cause liver and/or kidney effects or damage.
- **Naphthalene** - Excessive exposures may cause irritation to eyes, nose, throat and lungs, and respiratory tract. Central nervous system effects may occur. Excessive exposures may also result in dizziness, loss of balance and coordination, unconsciousness, coma, respiratory failure and death.
- **Phenols, Cresols & Polynuclear Aromatic Compounds:** Excessive exposures may cause irritation to eyes, nose, throat and lungs, and respiratory tract. Short-term exposures may also cause transient photosensitization. Phototoxic reactions may occur following exposure to sunlight or ultraviolet light.
- **Carbon:** Not Reported/ Not Classified
- **Sulphur:** Sulphur is harmful if swallowed, causes skin and eye irritation.

Delayed (chronic) Effects by Component:

- **Benzene:** Early signs and symptoms of chronic overexposure include effects on CNS & the GI tract (headache, loss of appetite, drowsiness, nervousness, & pallor) but the major manifestation of toxicity is aplastic anemia. Bone marrow depression may occur resulting in leucopoenia, anemia, or thrombocytopenia (leukemogenic action). With continued exposure the disease states may progress to pancytopenia resulting from bone marrow aplasia. Evidence has linked benzene in the etiology of leukemia.
- **Toluene:** Chronic exposure has been associated with headache, lassitude, and nausea, loss of coordination, memory loss, and loss of appetite. Enlargement of the liver, a moderate decrease in red blood cells, and reduction in white blood cells, as well as palpitations, weakness, and impaired reaction time may occur. The neurological effects of chronic exposure to high levels of toluene gradually progress to an irreversible state. Besides effects on behavior and intelligence, degeneration of the optic nerve and nerve deafness have also been reported. De-fatting dermatitis from repeated contact with the skin may also occur.
- **Xylene:** Chronic exposure of humans to xylenes, as seen in occupational settings, has resulted primarily in neurological effects such as headache, dizziness, fatigue, tremors, and in-coordination. Labored breathing, impaired pulmonary function, increased heart palpitation, severe chest pain, an abnormal EKG, and possible effects on the blood and kidney have also been reported. Various bleeding disorders have been reported in connection with chronic xylene toxicity.
- **Naphthalene:** Chronic exposure of workers to naphthalene has been reported to cause cataracts and retinal hemorrhage. Exposure may also result in headache, loss of appetite, and nausea. Kidney damage has also been reported in connection with chronic naphthalene exposure.

Delayed (chronic) Effects by Component:

- **Phenols, Cresols & Polynuclear Aromatic Compounds:** Chronic exposure to excessive concentrations may cause vomiting, difficulty in swallowing, diarrhea, lack of appetite, headache, fainting, dizziness dark urine, mental disturbances, damage to the lungs, liver, kidneys, pancreas, spleen and death may occur. Increased risk of developing skin, lung and kidney cancer. Prolonged exposure may also cause liver enlargement, swollen sinus tissue and intense bronze pigmentation, dermatitis and acne-like lesions of the skin.
- **Carbon:** Chronic inhalation may lead to decreased pulmonary function.
- **Sulphur:** Sulphur compounds, present in the fumes, may irritate the skin, eyes, lungs and gastrointestinal tract. May cause damage to the lung from prolonged or repeated exposure, Sulphur dioxide vapor is irritating to the respiratory tract and can cause lung damage with repeated or prolonged exposure.

Section 12 - Ecological Information

12(a) Ecotoxicity (aquatic & terrestrial): No Data Found

12(b) Persistence & Degradability: Loss due to volatility

12(c) Bioaccumulative Potential: No Data Found

12(d) Mobility (in soil): No Data Found

12(e) Other adverse effects:

- Red sea bream LL_{50} = 128 mg/L (REACH)
- Oryzias latipes LL_{50} 100 – 1000 mg/L (REACH)
- Carassius auratus NOEC > 1 g/L
- Daphnia magna NOEC > 1 g/L

Additional Information:

Hazard Category: Not Reported

Signal Word: No Signal Word

Hazard Symbol: No Symbol

Hazard Statement: No Statement

Section 13 - Disposal Considerations

Disposal: This material is considered a hazardous waste. Dispose in approved landfill or incinerate. Follow applicable federal, provincial, state and local regulations for disposal of hazardous waste accumulated during handling operations of the product. Under RCRA, it is the responsibility of the user of the product to determine, at the time of disposal, whether the product meets RCRA criteria for hazardous waste.

European Waste Catalogue (EWC): 05-06-03 (other tars); hazardous waste

Container Cleaning and Disposal: Dispose of contents in accordance with federal, provincial, state and local regulations. Observe safe handling precautions.

Section 14 - Transport Information

14 (a-g) Transportation Information: This material is considered a hazardous waste. Dispose in approved landfill or incinerate. Follow applicable federal, provincial, state and local regulations for disposal of hazardous waste accumulated during handling operations of the product.
TDG/US Department of Transportation (DOT) under federal TDG and 49 CFR 172.101 regulates **Tar Decanter Sludge** as **(Environmentally Hazardous Substance, liquid, n.o.s.)**. All federal, provincial, state, and local laws and regulations that apply to the transport of this type of material must be adhered to.

Shipping Name: UN3082 environmentally hazardous substances, liquid nos (benzene), 9, III RQ. l. ***** **Shipping Symbols:** NA **Hazard Class:** NA **UN No.:** NA **Packing Group:** NA **DOT/ IMO Label:** 9 **Special Provisions (172.102):** 8,146.335,IB3,T4,TP1,TP29	**Packaging Authorizations** **a) Exceptions:** 155 **b) Non-bulk:** 203 **c) Bulk:** 241	**Quantity Limitations** **a) Passenger, Aircraft, or Railcar:** No Limit **b) Cargo Aircraft Only:** No Limit **Vessel Stowage Location:** 1 **DOT Reportable Quantities**: Benzene 1

* If greater than 10,000 lbs shipped

International Maritime Dangerous Goods (IMDG) and the Regulations Concerning the International Carriage of Dangerous Goods by Rail (RID) classification, packaging and shipping requirements follow the US DOT Hazardous Materials Regulation.

Regulations Concerning the International Carriage of Dangerous Goods by Road (ADR) does not regulate **Tar Decanter Sludge** as a hazardous material.

Shipping Name: RQ, UN3082, Environmentally Hazardous Substances, liquid, n.o.s., Class 9, PGIII, (Benzene) **Classification Code:** 9 **UN No.:** UN3082 **Packing Group:** III **ADR Label:** Environmentally hazardous substances **Special Provisions:** 179,274,335,909 **Limited Quantities:** 5L	**Packaging** **a) Packing Instructions:** P001, LP01 **b) Special Packing Provisions:** PP1 **c) Mixed Packing Provisions:** NA	**Portable Tanks & Bulk Containers a)** **Instructions:** T4 **b) Special Provisions:** TP2.TP29

International Air Transport Association (IATA) does not regulate **Tar Decanter Sludge** as a hazardous material.

Shipping Name: RQ, UN3082, Environmentally Hazardous Substances, liquid, n.o.s., Class 9, PGIII, (Benzene) **Class/Division:** 9 **Hazard Label (s):** Miscellaneous **UN No.:** 3082 **Packing Group:** III **Excepted Quantities (EQ):** E1	**Passenger & Cargo Aircraft Limited Quantity (EQ)**		**Cargo Aircraft Only**	**Special Provisions:** A97, A158
	Pkg Inst: NY914 **Max Net Qty/Pkg:** 30 kg G	**Pkg Inst:** 914 **Max Net Qty/Pkg:** 450 L	**Pkg Inst:** 914 **Max Net Qty/Pkg:** 450 L	**ERG Code:** 9L

Pkg Inst – Packing Instructions Max Net Qty/Pkg – Maximum Net Quantity per Package ERG – Emergency Response Drill Code

Section 14 - Transport Information (continued)

14 (a-g) Transportation Information: (continued)

Transport Dangerous Goods (TDG) Classification: Crude Coal Tar

Shipping Name: Environmentally Hazardous Substance, liquid, n.o.s. (contains benzo(a)pyrene and anthracene) **Shipping Symbols:** G **Hazard Class:** 9	**UN No** UN3082 **Packing Group:** PG III **Label:** 9

Section 15 - Regulatory Information

Regulatory Information: *The following listing of regulations relating to a Stelco product may not be complete and should not be solely relied upon for all regulatory compliance responsibilities.* This product and/or its constituents are subject to the following regulations:

SARA Potential Hazard Categories: Immediate Acute Health Hazard, Delayed Chronic Health Hazard.

Section 313 Supplier Notification: The product, **Tar Decanter Sludge** contains the following toxic chemicals subject to the reporting requirements of section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR part 372:

CAS #	Chemical Name	Percent by Weight
120-12-7	Anthracene	<3
71-43-2	Benzene	<0.1
56-55-3	Benz(a)anthracene	1.05
207-08-9	Benzo(k)fluoranthene	0.42
191-24-2	Benzo(g,h,i)perylene	0.54
50-32-8	Benzo(a)pyrene	0.98
218-01-9	Chrysene	0.82
53-70-3	Dibenz(a,h)anthracene	0.13
100-41-4	Ethylbenzene	<0.1
206-44-0	Fluoranthene	3.42
193-39-5	Indeno(1,2,3-cd)pyrene	0.61
91-20-3	Naphthalene	11.75
85-01-8	Phenanthrene	<7
100-42-5	Styrene	<1.0

State Regulations: The product, **Tar Decanter Sludge** as a whole is not listed in any state regulations. However, individual components of the product are listed in various state regulations.
California Prop. 65: Tar Decanter Sludge as a whole is not listed. However, individual components of the product are listed.

This product has been classified in accordance with the hazard criteria of the Hazardous Products Regulations and the SDS contains all the information required by the Hazardous Products Regulations.

Section 16 - Other Information

Prepared By: Stelco Inc.

Revision History:

8/21/2025 – Update to comply with amendments to the Hazardous Products Regulations
06/30/2017 – Update to Stelco
02/6/2014 - Update to OSHA HAZCOM 2012
08/01/1985 – Original issue date

Additional Information:

Hazardous Material Identification System (HMIS) Classification

Health Hazard	2
Fire Hazard	1
Physical Hazard	1

HEALTH = 2, Denotes Temporary or minor injury may occur.
FIRE = **1**, Materials that must be preheated before ignition will occur. Includes liquids, solids and semi solids having a flash point above 200°F. (Class IIIB).
PHYSICAL HAZARDS = 1, Materials that are normally stable, but can become unstable (self-react) at high temperatures and pressures. Materials may react non-violently with water or undergo hazardous polymerization in the absence of inhibitors.

National Fire Protection Association (NFPA)



HEALTH 2 = **2** – Intense or continued exposure could cause temporary incapacitation or possible residual injury unless prompt medical attention is given.
FIRE = **1** – Must be preheated before ignition can occur.
INSTABILITY = **1-** Normally stable, but can become unstable at elevated temperatures and pressures or may react with water with some release of energy, but not violently.

Section 16 - Other Information (continued)

ABBREVIATIONS/ACRONYMS:

ACGIH	American Conference of Governmental Industrial Hygienists	**NIF**	No Information Found
BEIs	Biological Exposure Indices	**NIOSH**	National Institute for Occupational Safety and Health
CAS	Chemical Abstracts Service	**NTP**	National Toxicology Program
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act	**ORC**	Organization Resources Counselors
CFR	Code of Federal Regulations	**OSHA**	Occupational Safety and Health Administration
CNS	Central Nervous System	**PEL**	Permissible Exposure Limit
GI, GIT	Gastro-Intestinal, Gastro-Intestinal Tract	**PNOR**	Particulate Not Otherwise Regulated
HMIS	Hazardous Materials Identification System	**PNOC**	Particulate Not Otherwise Classified
IARC	International Agency for Research on Cancer	**PPE**	Personal Protective Equipment
LC50	Median Lethal Concentration	**ppm**	parts per million
LD50	Median Lethal Dose	**RCRA**	Resource Conservation and Recovery Act
LD_{Lo}	Lowest Dose to have killed animals or humans	**RTECS**	Registry of Toxic Effects of Chemical Substances
LEL	Lower Explosive Limit	**SARA**	Superfund Amendment and Reauthorization Act
$\mu g/m^3$	microgram per cubic meter of air	**SCBA**	Self-contained Breathing Apparatus
mg/m^3	milligram per cubic meter of air	**STEL**	Short-term Exposure Limit
mppcf	million particles per cubic foot	**TLV**	Threshold Limit Value
SDS	Safety Data Sheet	**TWA**	Time-weighted Average
MSHA	Mine Safety and Health Administration	**UEL**	Upper Explosive Limit
MOL	Ontario Ministry of Labour	**WHMIS**	Workplace Hazardous Materials Information System
NFPA	National Fire Protection Association		

Disclaimer: This information is taken from sources or based upon data believed to be reliable. However, Stelco Inc. makes no warranty as to the absolute correctness or sufficiency of any of the foregoing or that additional or other measures may not be required under particular conditions.

Tar Decanter Sludge

Signal Word: DANGER

Symbols:



HAZARD STATEMENTS:

May cause allergic skin reaction
May cause genetic defects, cancer and damage fertility or the unborn child.

PRECAUTIONARY STATEMENTS

Wear protective gloves/protective clothing/eye protection/face protection.
Avoid breathing/gas/mist/vapors/spray.
Obtain, read and follow all safety instructions before use. Contaminated work clothing must not be allowed out of the workplace. If exposed or concerned: Get medical advice.
If on skin: Take off contaminated clothing. Wash with plenty of water. If skin irritation or rash occurs: Get medical help. Wash contaminated clothing before reuse.
Store locked up.
Dispose of contents in accordance with federal, provincial, state and local regulations.

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