Material Safety Data Sheet (MSDS) Of Crude Coal Tar

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product name	Coal Tar
Chemical name	TAR, COAL, HIGH-TEMP.
Internal identification	00228270
Synonyms; trade names	Crude Coal Tar
REACH registration number	01-2119511615-46
CAS number	65996-89-6
EU index number	648-082-00-2
EC number	266-024-0

1.2. Relevant identified uses of the substance or mixture and uses advised against

Identified uses	Raw material for production of several products through distillation. This substance is handled under strictly controlled conditions in accordance with REACH regulation Article 18(4) for transported isolated intermediates.
Uses advised against	Restricted to professional users.

1.3. Details of the supplier of the safety data sheet

Supplier ATDMCO

TELEPHONE NUMBER

0097145681743

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification (EC 1272/2008)

Physical hazards	Not Classified
Health hazards	Skin Sens. 1 - H317 Muta. 1B - H340 Carc. 1A - H350 Repr. 1B - H360
Environmental hazards	Aquatic Chronic 2 - H411
Classification Notes	This is a UVCB substance of variable composition. Classification is based on information from the REACH dossier and not the conventional method based on the classification of the individual components.

2.2. Label elements

EC number 266-024-0

Pictogram

Signal word Danger

Hazard statements
H317 May cause an allergic skin reaction.
H340 May cause genetic defects.
H350 May cause cancer.
H360 May damage fertility or the unborn child.
H411 Toxic to aquatic life with long lasting effects.

Precautionary statements
P201 Obtain special instructions before use.
P273 Avoid release to the environment.
P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.
P308+P313 IF exposed or concerned: Get medical advice/ attention.
P333+P313 If skin irritation or rash occurs: Get medical advice/ attention.
P501 Dispose of contents/ container in accordance with national regulations.

Supplemental label information RCH002a Restricted to professional users.

Contains TAR, COAL, HIGH-TEMP.

Supplementary precautionary statements
P202 Do not handle until all safety precautions have been read and understood.
P261 Avoid breathing vapours.
P272 Contaminated work clothing should not be allowed out of the workplace.
P302+P352 IF ON SKIN: Wash with plenty of water.
P362+P364 Take off contaminated clothing and wash it before reuse.
P391 Collect spillage.

2.3. Other hazards

This substance is not classified as PBT or vPvB according to current EU criteria. May cause photosensitivity.

SECTION 3: Composition/information on ingredients

3.1. Substances

TAR, COAL, HIGH-TEMP. **100%**

CAS number: 65996-89-6 EC number: 266-024-0 REACH registration number: 01-2119511615-46

This is a UVCB substance of variable composition.

Classification
Skin Sens. 1 - H317
Muta. 1B - H340
Carc. 1A - H350
Repr. 1B - H360
Aquatic Chronic 2 - H411

NAPHTHALENE	< 25%
CAS number: 91-20-3	EC number: 202-049-5
M factor (Acute) = 1	M factor (Chronic) = 1
This is a constituent contained in a UVCB substance.	

Classification
Flam. Sol. 2 - H228
Acute Tox. 4 - H302
Carc. 2 - H351
Aquatic Acute 1 - H400
Aquatic Chronic 1 - H410

BENZENE	< 2%
CAS number: 71-43-2	EC number: 200-753-7
This is a constituent contained in a UVCB substance.	

Classification
Flam. Liq. 2 - H225
Skin Irrit. 2 - H315
Eye Irrit. 2 - H319
Muta. 1B - H340
Carc. 1A - H350
STOT RE 1 - H372
Asp. Tox. 1 - H304

ANTHRACENE	< 2.5%
CAS number: 120-12-7	EC number: 204-371-1
M factor (Acute) = 100	M factor (Chronic) = 100
This is a constituent contained in a UVCB substance.	

Classification
Skin Irrit. 2 - H315
Eye Irrit. 2 - H319
STOT SE 3 - H335
Aquatic Acute 1 - H400
Aquatic Chronic 1 - H410

BENZO[A]PYRENE	< 2%
CAS number: 50-32-8	EC number: 200-028-5
M factor (Acute) = 1	M factor (Chronic) = 1
This is a constituent contained in a UVCB substance.	

Classification
Skin Sens. 1 - H317
Muta. 1B - H340
Carc. 1B - H350
Repr. 1B - H360FD
Aquatic Acute 1 - H400
Aquatic Chronic 1 - H410

The full text for all hazard statements is displayed in Section 16.

Product name	Coal Tar
Chemical name	TAR, COAL, HIGH-TEMP.
REACH registration number	01-2119511615-46
EU index number	648-082-00-2
CAS number	65996-89-6
EC number	266-024-0
Ingredient notes	Constituents listed in this section are relevant to PBT classification and substance classification.

SECTION 4: First aid measures

4.1. Description of first aid measures

General information	Immediate first aid is imperative. Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing. Show this Safety Data Sheet to the medical personnel.
Inhalation	Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing. Loosen tight clothing such as collar, tie or belt. Get medical attention if symptoms are severe or persist.
Ingestion	Never give anything by mouth to an unconscious person. Rinse mouth thoroughly with water. Do not induce vomiting unless under the direction of medical personnel. Get medical attention.
Skin contact	It is important to remove the substance from the skin immediately. In the event of any sensitisation symptoms developing, ensure further exposure is avoided. Remove contamination with soap and water or recognised skin cleansing agent. Get medical attention if symptoms are severe or persist after washing.
Eye contact	Rinse immediately with plenty of water. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention.
Protection of first aiders	First aid personnel should wear appropriate protective equipment during any rescue.

4.2. Most important symptoms and effects, both acute and delayed

General information	The severity of the symptoms described will vary dependent on the concentration and the length of exposure.
Inhalation	Vapour may irritate respiratory system/lungs.

Ingestion	May cause irritation. May cause stomach pain or vomiting.
Skin contact	Prolonged contact may cause redness, irritation and dry skin. May cause skin sensitisation or allergic reactions in sensitive individuals.
Eye contact	No specific symptoms known. May irritate eyes.

4.3. Indication of any immediate medical attention and special treatment needed

Notes for the doctor	Treat symptomatically.
Specific treatments	No specific chemical antidote is known to be required after exposure to this product. Persons suffering from asthma, eczema or skin problems should avoid contact, including dermal contact, with this product.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media	Extinguish with the following media: Foam, carbon dioxide or dry powder. Dry chemicals, sand, dolomite etc. Water spray, fog or mist.
Unsuitable extinguishing media	Do not use water jet as an extinguisher, as this will spread the fire.

5.2. Special hazards arising from the substance or mixture

Specific hazards	Containers can burst violently or explode when heated, due to excessive pressure build-up.
Hazardous combustion products	Thermal decomposition or combustion products may include the following substances: Oxides of carbon. Toxic gases or vapours.

5.3. Advice for firefighters

Protective actions during firefighting	Avoid breathing fire gases or vapours. Evacuate area. Keep upwind to avoid inhalation of gases, vapours, fumes and smoke. Ventilate closed spaces before entering them. Cool containers exposed to heat with water spray and remove them from the fire area if it can be done without risk. Cool containers exposed to flames with water until well after the fire is out. If a leak or spill has not ignited, use water spray to disperse vapours and protect men stopping the leak. Control run-off water by containing and keeping it out of sewers and watercourses. If risk of water pollution occurs, notify appropriate authorities.
Special protective equipment for firefighters	Wear positive-pressure self-contained breathing apparatus (SCBA) and appropriate protective clothing. Firefighter's clothing conforming to European standard EN469 (including helmets, protective boots and gloves) will provide a basic level of protection for chemical incidents.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions	Wear protective clothing as described in Section 8 of this safety data sheet. No action shall be taken without appropriate training or involving any personal risk. Avoid inhalation of vapours and contact with skin and eyes. Provide adequate ventilation.

6.2. Environmental precautions

Environmental precautions	Avoid discharge into drains or watercourses or onto the ground. Avoid discharge to the aquatic environment.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up	Stop leak if safe to do so. Do not touch or walk into spilled material. Absorb in vermiculite, dry sand or earth and place into containers. Containers with collected spillage must be properly labelled with correct contents and hazard symbol.

6.4. Reference to other sections

Reference to other sections For personal protection, see Section 8. For waste disposal, see Section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Usage precautions Read and follow manufacturer's recommendations. Wear protective clothing as described in Section 8 of this safety data sheet. Do not eat, drink or smoke when using this product. Avoid spilling. Avoid contact with skin and eyes. Avoid inhalation of vapours. Wear protective skin cream on exposed skin before and during work shift. To reduce sun sensitivity a sun-blocking lotion (SPF 15+) can also be applied prior to application of a protective cream. Good personal hygiene procedures should be implemented. Wash hands and any other contaminated areas of the body with soap and water before leaving the work site. Pregnant or breastfeeding women should not work with this product if there is any risk of exposure.

Advice on general occupational hygiene Wash promptly if skin becomes contaminated. Take off contaminated clothing and wash it before reuse.

7.2. Conditions for safe storage, including any incompatibilities

Storage precautions Keep only in the original container. Keep container tightly closed, in a cool, well ventilated place. Keep away from heat, sparks and open flame. Store away from the following materials: Oxidising agents.

Storage class Miscellaneous hazardous material storage.

7.3. Specific end use(s)

Specific end use(s) The identified uses for this product are detailed in Section 1.2.

SECTION 8: Exposure Controls/personal protection

8.1. Control parameters

Occupational exposure limits

BENZENE

Long-term exposure limit (8-hour TWA): WEL 1 ppm 3.25 mg/m³
Carc, Sk

WEL = Workplace Exposure Limit
Carc = Capable of causing cancer and/or heritable genetic damage.
Sk = Can be absorbed through the skin.

8.2. Exposure controls

Protective equipment

Appropriate engineering controls Provide adequate general and local exhaust ventilation. Ensure the ventilation system is regularly maintained and tested. Good general ventilation should be adequate to control worker exposure to airborne contaminants. Observe any occupational exposure limits for the product or ingredients. All handling should only take place in well-ventilated areas.

Eye/face protection Wear tight-fitting, chemical splash goggles or face shield. Eyewear complying with an approved standard should be worn if a risk assessment indicates eye contact is possible. Personal protective equipment for eye and face protection should comply with European Standard EN166.

Hand protection	Wear protective gloves. The most suitable glove should be chosen in consultation with the glove supplier/manufacturer, who can provide information about the breakthrough time of the glove material. For exposure up to 4 hours, wear gloves made of the following material: Nitrile rubber. To protect hands from chemicals, gloves should comply with European Standard EN374. Considering the data specified by the glove manufacturer, check during use that the gloves are retaining their protective properties and change them as soon as any deterioration is detected. The breakthrough time for any glove material may be different for different glove manufacturers. Frequent changes are recommended.
Other skin and body protection	Wear appropriate clothing to prevent any possibility of skin contact. Refer to European Standard EN 1149 for information on material and design requirements and test methods.
Hygiene measures	Provide eyewash station. Promptly remove any clothing that becomes wet or contaminated. Wash promptly with soap and water if skin becomes contaminated. Contaminated clothing should be placed in a closed container for disposal or decontamination. Warn cleaning personnel of any hazardous properties of the product. Wash hands and any other contaminated areas of the body with soap and water before leaving the work site. When using do not eat, drink or smoke.
Respiratory protection	Wear a respirator fitted with the following cartridge: Combination filter, type A2/P3. Ensure all respiratory protective equipment is suitable for its intended use and is 'CE'-marked. Check that the respirator fits tightly and the filter is changed regularly. Gas and combination filter cartridges should comply with European Standard EN14387. Full face mask respirators with replaceable filter cartridges should comply with European Standard EN136. Half mask and quarter mask respirators with replaceable filter cartridges should comply with European Standard EN140.
Thermal hazards	Contact with hot product can cause serious thermal burns. If there is a risk of contact with hot product, all protective equipment worn should be suitable for use with high temperatures. To protect hands from high temperatures, gloves should comply with European Standard EN407.
Environmental exposure controls	Keep container tightly sealed when not in use. Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

SECTION 9: Physical and Chemical Properties

9.1. Information on basic physical and chemical properties

Appearance	Viscous liquid.
Colour	Brown. Black.
Odour	Coal tar.
Odour threshold	No information available.
pH	No information available.
Melting point	-9°C
Initial boiling point and range	80 - 350°C @ 1013 hPa
Flash point	> 61°C Closed cup.
Evaporation rate	No information available.
Flammability (solid, gas)	No information available.
Upper/lower flammability or explosive limits	Lower flammable/explosive limit: 1 g/100 g Upper flammable/explosive limit: 6 g/100 g

Vapour pressure	1.091 kPa @ 20°C The vapour pressure is estimated from the vapour pressure curve at high temperature.
Vapour density	No information available.
Relative density	1.10 - 1.30 @ 20°C
Solubility(ies)	Miscible with water. 0.0135 g/100 g water @ 20°C
Partition coefficient	No information available.
Auto-ignition temperature	> 560°C
Decomposition Temperature	> 400°C
Viscosity	1.33 cSt @ 20°C
Explosive properties	Not considered to be explosive.
Oxidising properties	Does not meet the criteria for classification as oxidising.

9.2. Other information

Other information	No information required.

SECTION 10: Stability and reactivity

10.1. Reactivity

Reactivity	There are no known reactivity hazards associated with this product.

10.2. Chemical stability

Stability	Stable at normal ambient temperatures and when used as recommended. Stable under the prescribed storage conditions.

10.3. Possibility of hazardous reactions

Possibility of hazardous reactions	No potentially hazardous reactions known.

10.4. Conditions to avoid

Conditions to avoid	Avoid heat, flames and other sources of ignition.

10.5. Incompatible materials

Materials to avoid	Strong oxidising agents.

10.6. Hazardous decomposition products

Hazardous decomposition products	Heating may generate the following products: Toxic gases or vapours. Oxides of carbon.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity - oral

Notes (oral LD_{50})	LD_{50} : > 2000 mg/kg, Rat, Based on available data the classification criteria are not met.

Acute toxicity - dermal

Notes (dermal LD_{50})	Based on available data the classification criteria are not met.

Acute toxicity - inhalation

Notes (inhalation LC_{50})	Based on available data the classification criteria are not met.

Skin corrosion/irritation

Animal data	Based on available data the classification criteria are not met.
Human skin model test	Erythema/eschar score: Very slight erythema - barely perceptible (1). Irritating. Occupational experience. Irritation in the presence of UV light.

Serious eye damage/irritation

Serious eye damage/irritation	Based on available data the classification criteria are not met.

Respiratory sensitisation

Respiratory sensitisation	Based on available data the classification criteria are not met.

Skin sensitisation

Skin sensitisation	Local Lymph Node Assay (LLNA) - Mouse: Sensitising. Skin Sens. 1 - H317 May cause an allergic skin reaction.

Germ cell mutagenicity

Genotoxicity - in vitro	Bacterial reverse mutation test: Positive. Muta. 1B - H340 May cause genetic defects.

Carcinogenicity

Carcinogenicity	NOAEL ~ 36 mg/kg/day, Oral, Mouse LOAEC ~ 120 mg/kg/day, Oral, Mouse Read-across data. Carc. 1A - H350 May cause cancer.

Reproductive toxicity

Reproductive toxicity - fertility	Repr. 1B - H360 May damage fertility.
Reproductive toxicity - development	Repr. 1B - H360 May damage the unborn child.

Specific target organ toxicity - single exposure

STOT - single exposure	Not classified as a specific target organ toxicant after a single exposure.

Specific target organ toxicity - repeated exposure

STOT - repeated exposure	Not classified as a specific target organ toxicant after repeated exposure.

Aspiration hazard

Aspiration hazard	Based on available data the classification criteria are not met.

SECTION 12: Ecological Information

12.1. Toxicity

Toxicity	Aquatic Chronic 2 - H411 Toxic to aquatic life with long lasting effects.

Acute aquatic toxicity

Acute toxicity - fish	LL_{50}, 96 hours: > 250 mg/l, Brachydanio rerio (Zebra Fish) NOELR, 96 hours: 25 mg/l, Brachydanio rerio (Zebra Fish) LOELR, 96 hours: 50 mg/l, Brachydanio rerio (Zebra Fish)
Acute toxicity - aquatic invertebrates	EL_{50}, 48 hours: 72 mg/l, Daphnia magna EL_{100}, 48 hours: 250 mg/l, Daphnia magna NOELR, 48 hours: 25 mg/l, Daphnia magna LOELR, 48 hours: 50 mg/l, Daphnia magna
Acute toxicity - aquatic plants	NOELR, 72 hours: 5 mg/l, Desmodesmus subspicatus LOELR, 72 hours: 25 mg/l, Desmodesmus subspicatus EL_{50}, 72 hours: 36 mg/l, Desmodesmus subspicatus EL_{100}, 72 hours: ~ 50 mg/l, Desmodesmus subspicatus

12.2. Persistence and degradability

Persistence and degradability	There are no data on the degradability of this product.

Phototransformation	Highly insoluble in water.
Biodegradation	Scientifically unjustified.

12.3. Bioaccumulative potential

Bioaccumulative potential	Bioaccumulation is unlikely to be significant because of the low water-solubility of this product.
Partition coefficient	No information available.

12.4. Mobility in soil

Mobility	The product has poor water-solubility.

12.5. Results of PBT and vPvB assessment

Results of PBT and vPvB assessment	This substance is not classified as PBT or vPvB according to current EU criteria.

12.6. Other adverse effects

Other adverse effects	None known.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

General information	The generation of waste should be minimised or avoided wherever possible. Reuse or recycle products wherever possible. Residues and empty containers should be taken care of as hazardous waste according to local and national provisions. When handling waste, the safety precautions applying to handling of the product should be considered. Care should be taken when handling emptied containers that have not been thoroughly cleaned or rinsed out. Empty containers or liners may retain some product residues and hence be potentially hazardous.
Disposal methods	Dispose of waste to licensed waste disposal site in accordance with the requirements of the local Waste Disposal Authority. Waste, residues, empty containers, discarded work clothes and contaminated cleaning materials should be collected in designated containers, labelled with their contents.
Waste class	05 06 03

SECTION 14: Transport information

14.1. UN number

UN No. (ADR/RID)	3082
UN No. (IMDG)	3082
UN No. (ICAO)	3082
UN No. (ADN)	3082

14.2. UN proper shipping name

Proper shipping name (ADR/RID)	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (TAR, COAL, HIGH-TEMP.)
Proper shipping name (IMDG)	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (TAR, COAL, HIGH-TEMP.)
Proper shipping name (ICAO)	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (TAR, COAL, HIGH-TEMP.)

Proper shipping name (ADN)	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (TAR, COAL, HIGH-TEMP.)

14.3. Transport hazard class(es)

ADR/RID class	9
ADR/RID classification code	M6
ADR/RID label	9
IMDG class	9
ICAO class/division	9
ADN class	9 (N2, CMR, S)

Transport labels

14.4. Packing group

ADR/RID packing group	III
IMDG packing group	III
ADN packing group	III
ICAO packing group	III

14.5. Environmental hazards

Environmentally hazardous substance/marine pollutant

14.6. Special precautions for user

EmS	F-A, S-F
ADR transport category	3
Emergency Action Code	•3Z
Hazard Identification Number (ADR/RID)	90

14.7. Transport in bulk according to Annex II of MARPOL and the IBC Code

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code	Pollution category: Cat X Ship type: 2

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

EU legislation	Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures (as amended). Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) (as amended). Commission Regulation (EU) 2015/830 of 28 May 2015.
Authorisations (Title VII Regulation 1907/2006)	No specific authorisations are known for this product.
Restrictions (Title VIII Regulation 1907/2006)	Entry number: 28-30 Restricted to professional users.

15.2. Chemical safety assessment

No chemical safety assessment has been carried out.

SECTION 16: Other information

Classification procedures according to Regulation (EC) 1272/2008	Skin Sens. 1 - H317, Carc. 1A - H350, Muta. 1B - H340, Repr. 1B - H360, Aquatic Chronic 2 - H411: Expert judgement.
Revision comments	Commission Regulation (EU) No 2015/830 of 28 May 2015.
Revision date	22/05/2017
Revision	5
Supersedes date	13/12/2013
SDS number	10026
Hazard statements in full	H225 Highly flammable liquid and vapour. H228 Flammable solid. H302 Harmful if swallowed. H304 May be fatal if swallowed and enters airways. H315 Causes skin irritation. H317 May cause an allergic skin reaction. H319 Causes serious eye irritation. H335 May cause respiratory irritation. H340 May cause genetic defects. H350 May cause cancer. H351 Suspected of causing cancer. H360 May damage fertility or the unborn child. H360FD May damage fertility. May damage the unborn child. H372 Causes damage to organs through prolonged or repeated exposure. H400 Very toxic to aquatic life. H410 Very toxic to aquatic life with long lasting effects. H411 Toxic to aquatic life with long lasting effects.