

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

- **1.1 Product identifier**
- **Trade name: Ramming paste**
- **1.2 Relevant identified uses of the substance or mixture and uses advised against**
 At the moment there is no information available.
- **1.3 Application of the substance / the mixture** Ramming paste
- **1.4 Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**
 Rheinfelden Carbon GmbH & Co KG
 Bukheinstr. 2
 79618 Rheinfelden
 Germany
 Tel.: +49 7623 93 211
 Fax: +49 7623 93 548
- **Further information obtainable from:** msds@rheinfelden-carbon.eu
- **1.5 Emergency telephone number:** +49 7623 93 375 (24 hours)

SECTION 2: Hazards identification

- **2.1 Classification of the substance or mixture**
- **Classification according to Regulation (EC) No 1272/2008**



GHS08 health hazard

Muta. 1B	H340	May cause genetic defects.
Carc. 1B	H350	May cause cancer.
Repr. 1A	H360FD	May damage fertility. May damage the unborn child.
Asp. Tox. 1	H304	May be fatal if swallowed and enters airways.



GHS07

Skin Irrit. 2	H315	Causes skin irritation.
Skin Sens. 1	H317	May cause an allergic skin reaction.
Aquatic Chronic 4	H413	May cause long lasting harmful effects to aquatic life.

- **2.2 Label elements**
- **Labelling according to Regulation (EC) No 1272/2008**
 The product is classified and labelled according to the CLP regulation.
- **Hazard pictograms**



GHS07



GHS08

- **Signal word** Danger
- **Hazard-determining components of labelling:**
 Pitch, coal tar, high-temp., heat-treated
 Creosote oil, acenaphthene fraction
 Distillates (coal tar), heavy oils
- **Hazard statements**
 H315 Causes skin irritation.
 H317 May cause an allergic skin reaction.

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- H340 May cause genetic defects.
- H350 May cause cancer.
- H360FD May damage fertility. May damage the unborn child.
- H304 May be fatal if swallowed and enters airways.
- H413 May cause long lasting harmful effects to aquatic life.

Precautionary statements

- P201 Obtain special instructions before use.
- P202 Do not handle until all safety precautions have been read and understood.
- P264 Wash thoroughly after handling.
- P273 Avoid release to the environment.
- P280 Wear protective gloves/protective clothing/eye protection/face protection.
- P281 Use personal protective equipment as required.
- P261 Avoid breathing dust/fume/gas/mist/vapours/spray.
- P272 Contaminated work clothing should not be allowed out of the workplace.
- P302+P352 IF ON SKIN: Wash with plenty of soap and water.
- P321 Specific treatment (see on this label).
- P362 Take off contaminated clothing and wash before reuse.
- P363 Wash contaminated clothing before reuse.
- P308+P313 IF exposed or concerned: Get medical advice/attention.
- P333+P313 If skin irritation or rash occurs: Get medical advice/attention.
- P405 Store locked up.
- P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

2.3 Other hazards

Results of PBT and vPvB assessment

- **PBT:** Not applicable.
- **vPvB:** Not applicable.

SECTION 3: Composition/information on ingredients

3.2 Chemical characterisation: Mixtures

- **Description:** Mixture of substances listed below with nonhazardous additions.

Dangerous components:

CAS: 121575-60-8 EC number: 310-162-7 Index number: 648-056-00-0 Reg.nr.: 01-2119638193-40-XXXX	Pitch, coal tar, high-temp., heat-treated ⚠ Muta. 1B, H340; Carc. 1B, H350; Repr. 1A, H360FD ⚠ Skin Sens. 1, H317 ⚠ Aquatic Chronic 4, H413	<10%
CAS: 90640-84-9 EINECS: 292-605-3 Index number: 648-098-00-X Reg.nr.: 01-2119548393-35-XXXX	Creosote oil, acenaphthene fraction ⚠ Muta. 2, H341; Carc. 1B, H350; STOT RE 2, H373; Asp. Tox. 1, H304 ⚠ Aquatic Chronic 2, H411 ⚠ Skin Irrit. 2, H315; Skin Sens. 1, H317	<10%
CAS: 90640-86-1 EINECS: 292-607-4 Index number: 648-044-00-5 Reg.nr.: 01-2119539472-38-XXXX	Distillates (coal tar), heavy oils ⚠ Muta. 1B, H340; Carc. 1B, H350; Repr. 2, H361fd; Asp. Tox. 1, H304 ⚠ Skin Irrit. 2, H315; Skin Sens. 1, H317 ⚠ Aquatic Chronic 3, H412	<5%
CAS: 50-32-8 EINECS: 200-028-5 Index number: 601-032-00-3	benzo[a]pyrene ⚠ Muta. 1B, H340; Carc. 1B, H350; Repr. 1B, H360FD ⚠ Aquatic Acute 1, H400; Aquatic Chronic 1, H410 ⚠ Skin Sens. 1, H317	<0,01%

- **Additional information:** For the wording of the listed risk phrases refer to section 16.

SECTION 4: First aid measures

4.1 Description of first aid measures

General information:

- Take affected persons out of danger area and lay down.
- Immediately remove any clothing soiled by the product.

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- Seek medical treatment.
- **After inhalation:**
Supply fresh air and to be sure call for a doctor.
In case of unconsciousness place patient stably in side position for transportation.
- **After skin contact:**
After contact with the molten product, cool rapidly with cold water.
Immediately wash with water and soap and rinse thoroughly.
If skin irritation continues, consult a doctor.
- **After eye contact:** Rinse opened eye for several minutes under running water. Then consult a doctor.
- **After swallowing:**
Do not induce vomiting
Rinse mouth with water
Call for a doctor immediately.
- **4.2 Most important symptoms and effects, both acute and delayed**
Breathing difficulty
Irritation of skin
Burns caused by molten product
- **4.3 Indication of any immediate medical attention and special treatment needed**
No further relevant information available.

SECTION 5: Firefighting measures

- **5.1 Extinguishing media**
- **Suitable extinguishing agents:** CO₂, Extinguishing powder, Foam and Water spray
- **For safety reasons unsuitable extinguishing agents:** Water with full jet
- **5.2 Special hazards arising from the substance or mixture**
During heating or in case of fire poisonous gases are produced.
Carbon monoxide (CO)
Carbon dioxide (CO₂)
Nitrogen oxides (NO_x)
Sulphur oxides (SO_x)
- **5.3 Advice for firefighters**
- **Protective equipment:** No special measures required.
- **Additional information** Cool endangered receptacles with water spray.

SECTION 6: Accidental release measures

- **6.1 Personal precautions, protective equipment and emergency procedures**
Use respiratory protective device against the effects of fumes/dust/aerosol.
Wear protective clothing.
Ensure adequate ventilation
Avoid skin and eye contact.
- **6.2 Environmental precautions:**
Do not allow to enter sewers/ surface or ground water.
Inform respective authorities in case of seepage into water course or sewage system.
Keep fire fighting water and dispose appropriately.
- **6.3 Methods and material for containment and cleaning up:**
Dispose contaminated material as waste according to item 13.
- **6.4 Reference to other sections**
See Section 7 for information on safe handling.
See Section 8 for information on personal protection equipment.
See Section 13 for disposal information.

SECTION 7: Handling and storage

- **7.1 Precautions for safe handling** Open and handle receptacle with care.
- **Information about fire - and explosion protection:** Keep respiratory protective device available.

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- **7.2 Conditions for safe storage, including any incompatibilities**
- **Storage:**
- **Requirements to be met by storerooms and receptacles:**
 - Store in dry conditions
 - Storage area and work places must be well ventilated
- **Information about storage in one common storage facility:** Store away from oxidising agents.
- **Further information about storage conditions:** None.
- **Storage class:** 6.1 C
- **7.3 Specific end use(s)** No further relevant information available.

SECTION 8: Exposure controls/personal protection

- **Additional information about design of technical facilities:** No further data; see item 7.
- **8.1 Control parameters**
- **Ingredients with limit values that require monitoring at the workplace:**
 - The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.
- **Additional information:** The lists valid during the making were used as basis.
- **8.2 Exposure controls**
- **Personal protective equipment:**
- **General protective and hygienic measures:**
 - Keep workwear separate from other clothes.
 - Keep away from foodstuffs, beverages and feed.
 - Immediately remove all soiled and contaminated clothing
 - Wash hands before breaks and at the end of work.
 - Store protective clothing separately.
 - Do not eat, drink, smoke or sniff while working.
- **Respiratory protection:**
 - In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device.
 - Filter P3
- **Protection of hands:**
 - The material of the gloves must be impenetrable and resistant against product / substance or mixture.
 - Protective gloves
 - The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.
 - Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.
 - Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation
- **Material of gloves**
 - The choice of a suitable material does not only depend on the material but also from further quality criteria and they can differ from manufacturer to manufacturer. The product is a mixture of several components and therefore the resistance of the material of the gloves cannot be predetermined and must be tested before use.
- **Penetration time of glove material**
 - The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.
- **For the permanent contact gloves made of the following materials are suitable:**
 - Butyl rubber, BR
 - Nitrile rubber, NBR
- **Eye protection:** Tightly sealed goggles
- **Body protection:** Protective work clothing
- **Limitation and supervision of exposure into the environment**
 - Information about environmental protection measures can be found under section 6.2.
 - Information about appropriate disposal can be found under section 13.

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SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

General Information

Appearance:

Form:	Grained
Colour:	Dark grey
Odour:	mineral oil-like
Odour threshold:	Not determined.
pH-value:	Not applicable.

Change in condition

Melting point/Melting range:	Undetermined.
Boiling point/Boiling range:	Undetermined.

- Flash point: Not applicable.
- Flammability (solid, gaseous): Product is not flammable.
- Ignition temperature: >550 °C
- Decomposition temperature: >400 °C (cokéfaction)
- Self-igniting: Product is not selfigniting.
- Danger of explosion: Product does not present an explosion hazard.
- Explosion limits:
 - Lower: Not determined.
 - Upper: Not determined.
- Oxidising properties: The product is not oxidizing.
- Vapour pressure: Not applicable.
- Density at 20 °C: 1,4-1,6 g/cm³
- Relative density: Not determined.
- Vapour density: Not applicable.
- Evaporation rate: Not applicable.
- Solubility in / Miscibility with water at 20 °C: 0,001 g/l (OECD Guideline 105)
- Partition coefficient (n-octanol/water): Not determined.
- Viscosity:
 - Dynamic: Not applicable.
 - Kinematic: Not applicable.
- Solvent content:
 - Organic solvents: 0,0 %
 - VOC (EC): 0,00 %
 - Solids content: 100,0 %

9.2 Other information

No further relevant information available.

SECTION 10: Stability and reactivity

- 10.1 Reactivity Stable at standard temperatures and pressure.
- 10.2 Chemical stability
- Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.
- 10.3 Possibility of hazardous reactions No dangerous reactions known.
- 10.4 Conditions to avoid
 - Avoid heat, flames, sparks and other sources of ignition.
 - Avoid contact with incompatible materials.
- 10.5 Incompatible materials: Strong oxidiziers.
- 10.6 Hazardous decomposition products:
 - Carbon monoxide
 - Carbon dioxide
 - Hydrocarbons

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SECTION 11: Toxicological information

• **11.1 Information on toxicological effects**

• **Acute toxicity**

• **LD/LC50 values relevant for classification:**

121575-60-8 Pitch, coal tar, high-temp., heat-treated

Oral	LD50	>2000 mg/kg (rat)
Dermal	LD50	>2000 mg/kg (rat)
	Carcinogenicity	Carc. Cat. 2 (.) (-) (based on BaP content)
	Mutagenicity	positive (.) (-) (bacteria) (Ames Test)

90640-84-9 Creosote oil, acenaphthene fraction

Oral	LD50	>2000 mg/kg (rat)
	LOAEL	~50 mg/kg (mouse) (81 wks)
Dermal	LD50	>2000 mg/kg (rat) (analog to structure-related tar oil)
Inhalative	LC50/4 h	>0,5 mg/l (rat)
	NOAEC	23 mg/m ³ /day (rat) (aerosol and gas)
	Carcinogenicity	(-) (if quinoline (CAS-No. 91-22-5) > 0.1 % positive)
	Corrosion/irritation	(-) (Weak irritating potential)
	Eye damage/irritation	(-)
	Mutagenicity	(-) (if quinone (CAS-No. 91-22-5) > 1 %)
	Reproduction toxicity	(-)
	Respiratory or skin sensitisation	(-)
	STOT-Single exposure	(-)

90640-86-1 Distillates (coal tar), heavy oils

Oral	LD50	>2000 mg/kg (rat) (analogy to structure-related tar oil)
Dermal	LD50	>2000 mg/kg (rat) (analogy to structure-related tar oil)
	Apiration hazard	(-)
	Carcinogenicity	(-)
	Corrosion/irritation	(-)
	Eye damage/irritation	(-)
	Mutagenicity	(-)
	Reproduction toxicity	(-)
	Respiratory or skin sensitisation	(-)
	STOT-Repeated exposure	(-)
	STOT-Single exposure	(-)
	Skin irriation/corrosion	(-)

• **Primary irritant effect:**

• **Skin corrosion/irritation**

After longer exposure might be irritant to skin.
 Causes skin irritation.

• **Serious eye damage/irritation** Might have irritating effect.

• **Respiratory or skin sensitisation**

May cause an allergic skin reaction.

• **Acute effects (acute toxicity, irritation and corrosivity)** This substance is phototoxic.

• **Sensitisation** Vapours from hot product may cause irritation of nose, throat and eyes.

• **CMR effects (carcinogenity, mutagenicity and toxicity for reproduction)**

Genotoxicity: positive (OECD 471)

Carcinogenicity: May cause cancer.

Reproductive Toxicity: May damage fertility or the unborn child.

• **Germ cell mutagenicity**

May cause genetic defects.

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- **Carcinogenicity**
May cause cancer.
- **Reproductive toxicity**
May damage fertility. May damage the unborn child.
- **STOT-single exposure** Based on available data, the classification criteria are not met.
- **STOT-repeated exposure** Based on available data, the classification criteria are not met.
- **Aspiration hazard**
May be fatal if swallowed and enters airways.

SECTION 12: Ecological information

- **12.1 Toxicity**
- **Aquatic toxicity:**
No further relevant information available.

121575-60-8 Pitch, coal tar, high-temp., heat-treated

EL50	>100 mg/l (selenastrum capricornutum) (72 h) (OECD 201)
	>1000 mg/l (daphnia) (48 h) (OECD 202)
LL50	>100 mg/l (fish) (96 h) (OECD 203)
NOELR	100 mg/L (selenastrum capricornutum) (72 h) (OECD 201)
	100 mg/L (daphnia) (21 d) (OECD 211)

90640-84-9 Creosote oil, acenaphthene fraction

Bioaccumulative potential	(-)
EC10	0,042 mg/l (daphnia) (semi-static)
EL50	69 mg/l (daphnia) (48 h) (OECD 202; static) (open system)
	2,7 mg/l (daphnia) (OECD 202; static) (closed system)
ErC10	0,038 mg/L (selenastrum capricornutum) (72 h)
ErL50	25 mg/L (selenastrum capricornutum) (72 h) (OECD 201, static)
LL50	79 mg/l (fish) (96 h) (OECD 203, semi-static)
NOEC	0,52 mg/L (fish) (28 d) (marine water, flow-through)
	0,32 mg/L (Frischwasserfisch) (28/34 d) (flow-through)
NOELR	12 - 15 mg/L (selenastrum capricornutum) (72 h)
Results of PBT and vPvB assessment	(-)

90640-86-1 Distillates (coal tar), heavy oils

EC10	0,013 mg/l (daphnia) (10 d) (semi static)
EL50	22,4 mg/l (daphnia) (48 h) (loading, closed system, semi-static)
ErC10	0,026 mg/L (selenastrum capricornutum) (72 h)
ErL50	48 mg/L (selenastrum capricornutum) (72 h) (loading static)
LL50	>100 mg/l (fish) (96 h) (loading, semi-static)
NOEC	50 mg/kg (crustacea) (sediment toxicity) (test conducted on phenanthrene)
	0,011 mg/L (fish) (28 d) (freshwater, semi-static)
	50 mg/kg (insect larvae) (sediment toxicity) (test conducted on phenanthrene)
NOELR	25 mg/L (selenastrum capricornutum) (72 h) (loading)

- **12.2 Persistence and degradability** No further relevant information available.
- **12.3 Bioaccumulative potential** No further relevant information available.
- **12.4 Mobility in soil** No further relevant information available.
- **Additional ecological information:**
- **General notes:**
Water hazard class 2 (German Regulation) (Self-assessment): hazardous for water
Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.
- **12.5 Results of PBT and vPvB assessment**
- **PBT:** Not applicable.

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- **vPvB:** Not applicable.
- **12.6 Other adverse effects** No further relevant information available.

SECTION 13: Disposal considerations

- **13.1 Waste treatment methods**
- **Recommendation**
Must not be disposed together with household garbage. Do not allow product to reach sewage system.

- **European waste catalogue**

05 00 00	WASTES FROM PETROLEUM REFINING, NATURAL GAS PURIFICATION AND PYROLYTIC TREATMENT OF COAL
05 06 00	wastes from the pyrolytic treatment of coal
05 06 03*	other tars

- **Uncleaned packaging:**
- **Recommendation:** Disposal must be made according to official regulations.

SECTION 14: Transport information

- **14.2 UN proper shipping name**
- **ADR,RID, ADN, IMDG, IATA** not regulated
- **14.5 Environmental hazards:**
- **Marine pollutant:** No
- **14.6 Special precautions for user** Not applicable.
- **14.7 Transport in bulk according to Annex II of Marpol and the IBC Code** Not applicable.
- **UN "Model Regulation":** Void

SECTION 15: Regulatory information

- **15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**
- **National regulations:**
- **Information about limitation of use:**
Workers are not allowed to be exposed to the hazardous carcinogenic materials contained in this preparation. Exceptions can be made by the authorities in certain cases.
- **15.2 Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

SECTION 16: Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

- **Relevant phrases**

- H304 May be fatal if swallowed and enters airways.
- H315 Causes skin irritation.
- H317 May cause an allergic skin reaction.
- H340 May cause genetic defects.
- H341 Suspected of causing genetic defects.
- H350 May cause cancer.
- H360FD May damage fertility. May damage the unborn child.
- H361fd Suspected of damaging fertility. Suspected of damaging the unborn child.
- H373 May cause 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.
- H412 Harmful to aquatic life with long lasting effects.
- H413 May cause long lasting harmful effects to aquatic life.

- **Abbreviations and acronyms:**

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)

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ICAO: International Civil Aviation Organisation

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

GHS: Globally Harmonised System of Classification and Labelling of Chemicals

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

VOC: Volatile Organic Compounds (USA, EU)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

Skin Irrit. 2: Skin corrosion/irritation, Hazard Category 2

Skin Sens. 1: Sensitisation - Skin, Hazard Category 1

Muta. 1B: Germ cell mutagenicity, Hazard Category 1B

Muta. 2: Germ cell mutagenicity, Hazard Category 2

Carc. 1B: Carcinogenicity, Hazard Category 1B

Repr. 1A: Reproductive toxicity, Hazard Category 1A

Repr. 1B: Reproductive toxicity, Hazard Category 1B

Repr. 2: Reproductive toxicity, Hazard Category 2

STOT RE 2: Specific target organ toxicity - Repeated exposure, Hazard Category 2

Asp. Tox. 1: Aspiration hazard, Hazard Category 1

Aquatic Acute 1: Hazardous to the aquatic environment - Acute Hazard, Category 1

Aquatic Chronic 1: Hazardous to the aquatic environment - Chronic Hazard, Category 1

Aquatic Chronic 2: Hazardous to the aquatic environment - Chronic Hazard, Category 2

Aquatic Chronic 3: Hazardous to the aquatic environment - Chronic Hazard, Category 3

Aquatic Chronic 4: Hazardous to the aquatic environment - Chronic Hazard, Category 4