

Glærur umhverfi mengun og förgun efna

Table 1: Environmental law*				
Law on waste disposal	Water rights	Chemical use legislation	Highway and traffic regulations	Labour protection legislation
Closed Substance Cycle Waste Management Act	Water Resources Act	Chemicals Act	Hazardous Cargo Act	Equipment Safety Act
Ordinance on Waste Oils Ordinance on End-of-life Vehicles Waste Catalogue Ordinance Ordinance on Waste Recovery and Disposal Records	Ordinance on Storage of Liquids Hazardous to Waters Ordinance on Equipment for Handling Materials Hazardous to Waters	Ordinance on Hazardous Materials and Substances	Ordinance on Hazardous Cargo Transportation	Ordinance on Flammable Liquids
Technical Instructions on Waste		Technical Guidelines on Hazardous Materials and Substances	Technical Directives	Technical Guidelines on Flammable Liquids

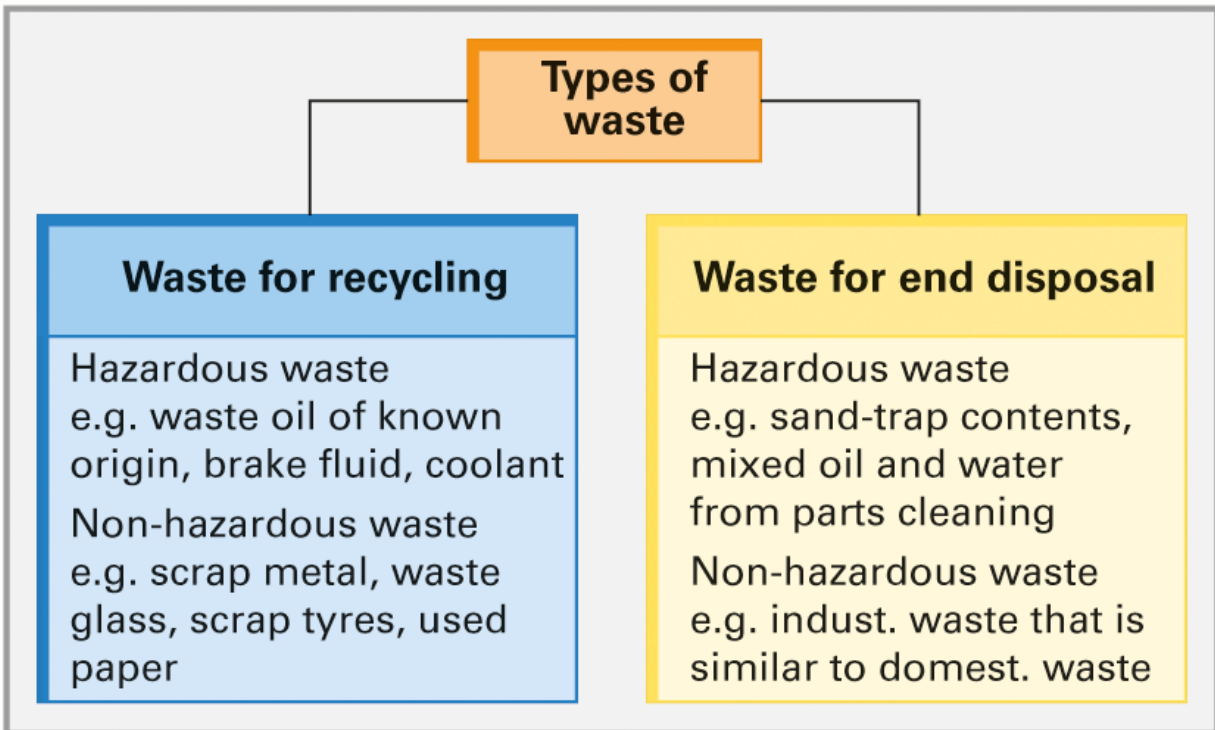
* The laws and ordinances mentioned in Chapter 2 relate to German and/or EU law.

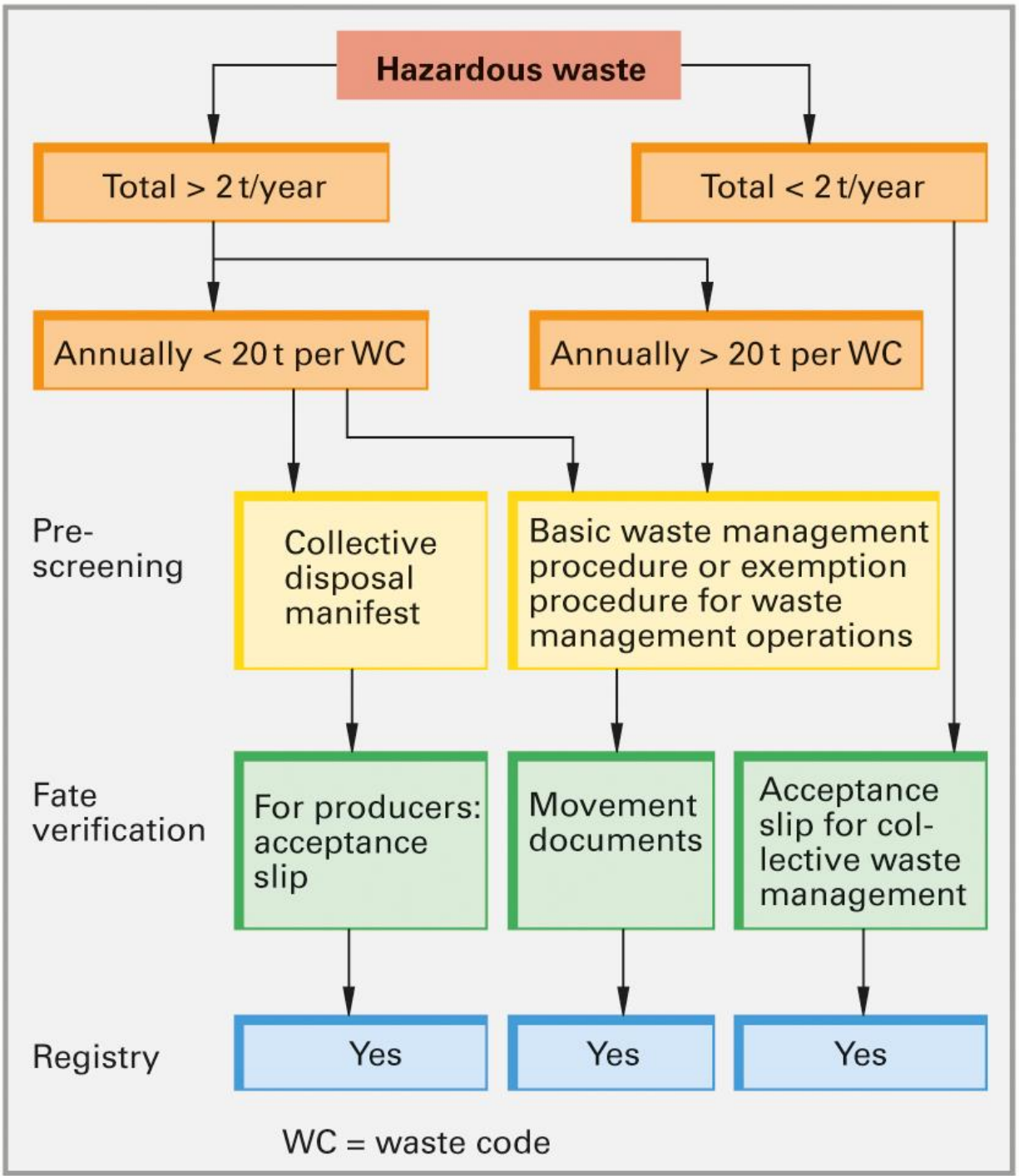


Table 1: Hazardous and non-hazardous waste (excerpt from the Waste Catalogue Ordinance)

EWC code	Type of waste
130204 *	Mineral-based chlorinated engine, gear and lubricating oils
130502 *	Sludges from oil/water separators
140603 *	Other solvents and solvent mixtures
160103	End-of-life tyres
160113 *	Brake fluids
160119	Plastic
160601 *	Lead batteries
160107 *	Oil filters

Waste is	to be avoided Conserve resources, e.g. no superfluous packaging materials
if not possible	to be recycled for its materials, e.g. recycling or energy-wise, e.g. heat generation
if not possible	to be disposed of Ultimate storage e.g. sand trap residues





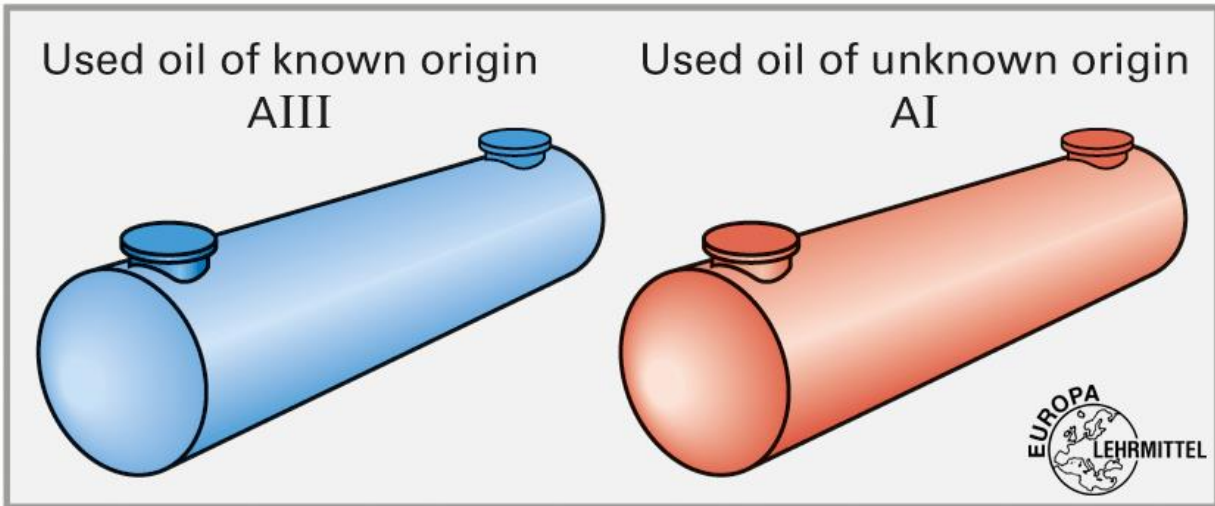


Table 1: Water hazard classes
<p>Substances posing a severe hazard to water (hazard class 3), e.g. waste oil, lubricating oils, solvents, fuels for spark-ignition engines</p>
<p>Substances posing a hazard to water (class 2), e.g. brake fluid, diesel fuels, heating oil</p>
<p>Substances posing a limited hazard to water (class 1), e.g. as battery electrolyte, coolant, petroleum</p>



Waste water in automotive service operations

Waste water requiring treatment

Examples: industrial effluents, contaminated rainwater from utilisable floorspace in automotive service operations

Waste water not requiring treatment

Examples: uncontaminated rainwater from the roof, domestic effluents

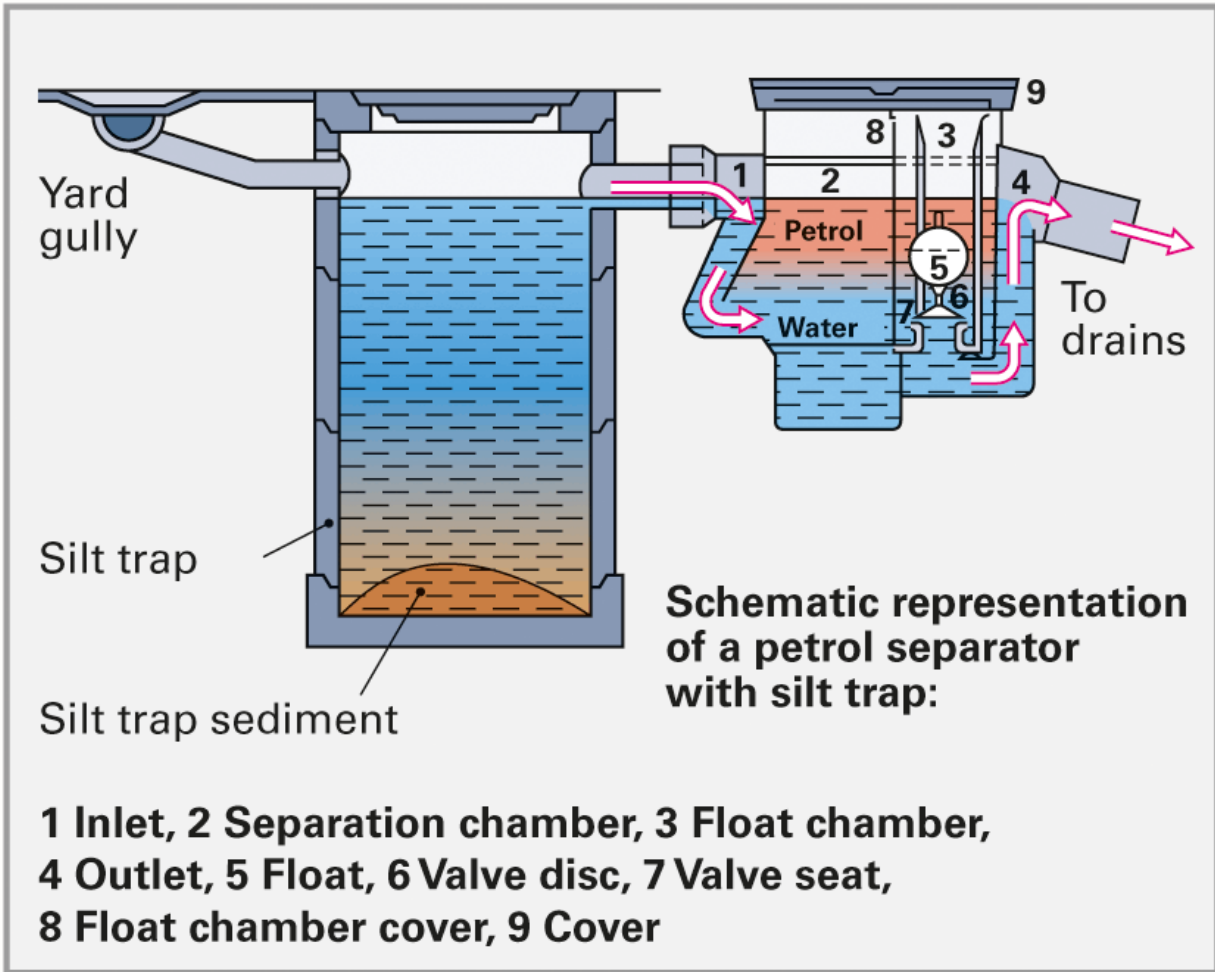
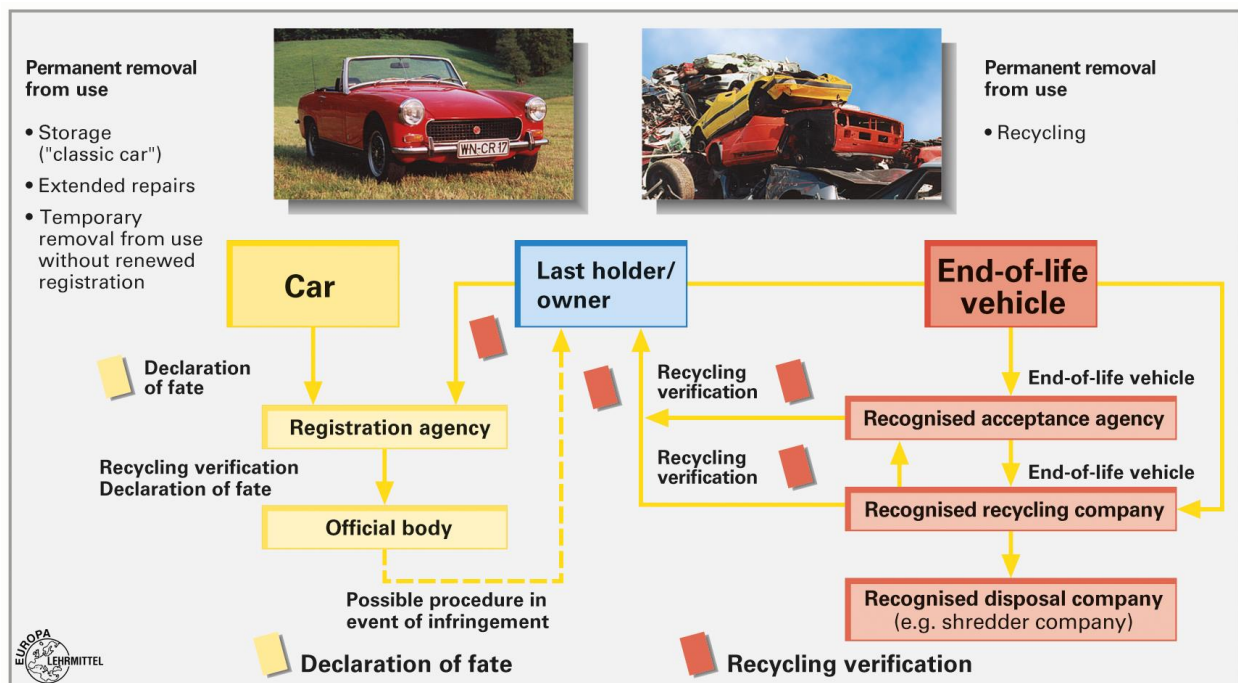


Table 1: Properties of hazardous substances and preparations as defined in the Chemicals Act

- | | |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <ul style="list-style-type: none"> ● Explosive ● Oxidising ● Highly flammable ● Easily flammable ● Flammable ● Extremely toxic ● Toxic ● Mildly toxic ● Caustic | <ul style="list-style-type: none"> ● Irritant ● Prolonged exposure may increase sensitivity ● Carcinogenic ● Source of embryonic damage ● Source of genetic damage ● Source of chronic illness ● Environmental hazard |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|



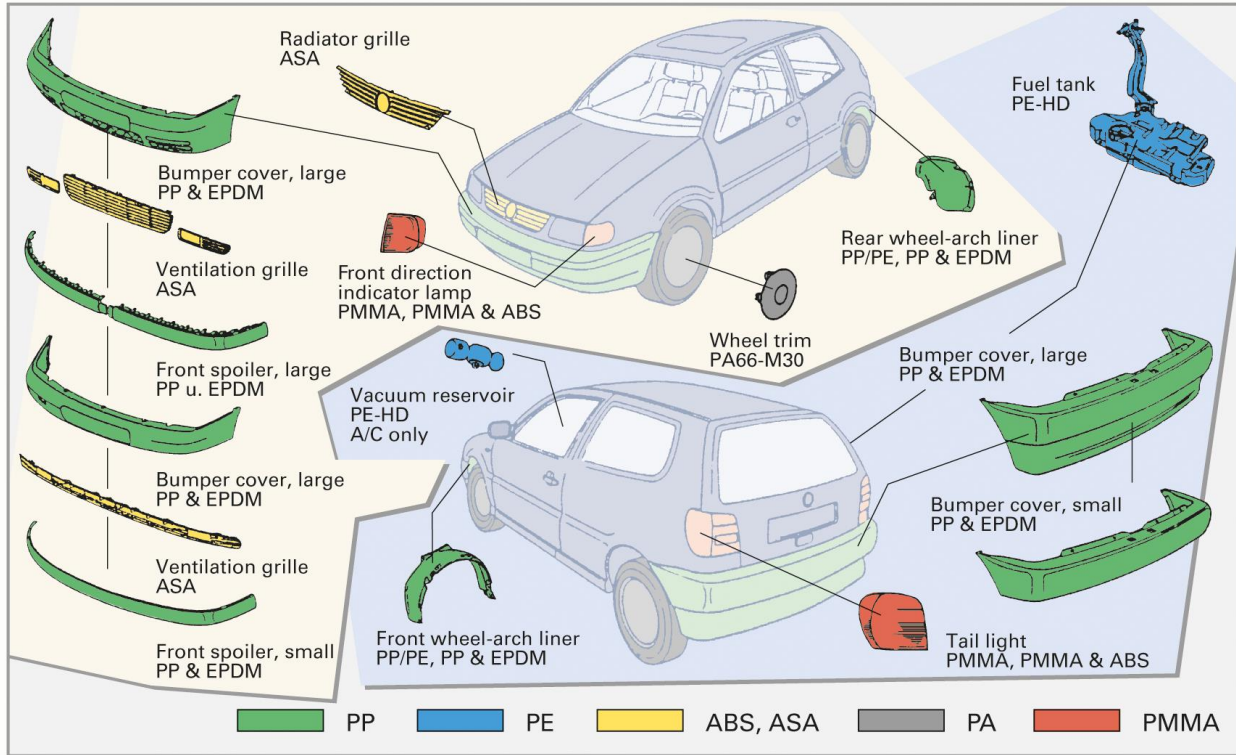


Table 1: The end-of-life vehicle as source of raw materials in percent by weight

Iron and steel	70%
Rubber	9%
Plastics and synthetic materials	8%
Glass	3%
Aluminium	3%
Copper, zinc, lead	2%
Other non-ferrous metals	1%
Other	4%



Autohaus Europa
Munich

Fire Safety Regulations

as per DIN 14 096-A



Help prevent fires

Comply with signs in designated areas that prohibit smoking and open flames.



In case of fire

Keep calm

Report the fire

Use push-button to activate fire alarm.

Alarm is forwarded automatically to the fire department.

Dial ☎ **0112** to notify the fire department.

Report the following:

- **Who** is calling?
- **What** is happening?
- **Where** is the fire?
- **How many** people are affected/injured?
- **Wait** for further questions.



Go to safety

- Warn endangered persons
- Help those in need of assistance
- Close doors
- Follow emergency evacuation signs
- Do not use elevators
- Follow instructions of fire safety officers/fire department










- Go to meeting place: _____

Attempt to extinguish fire

- Use fire extinguishers; ensure personal safety
- Use several portable fire extinguishers at once when possible



1.		1.1 Exposed moving machine parts	1.2 Parts with dangerous surfaces	1.3 Moving means of conveyance, moving work equipment	1.4 Uncontrolled moving parts	1.5 Falls (level ground), slips, tripping, twisting an ankle, taking a misstep	1.6 Falls
2.		2.1 Hazardous electric shock currents	2.2 Electric arcs				
3.		3.1 Gases	3.2 Vapours	3.3 Aerosols	3.4 Liquids	3.5 Solids	3.6 Runaway reactions
5.		5.1 Risk of fire due to solids, liquids and gases	5.2 Explosive atmospheres	5.3 Explosive material	5.4 Electrostatic charges		
7.		7.1 Noise	7.2 Ultrasound, subsonic noise	7.3 Whole-body vibration	7.4 Hand-arm vibration	7.7 Electromagnetic fields	
8.		8.1 Climate/air conditioning	8.2 Lighting	8.3 Required space/transport routes			
9.		9.1 Heavy dynamic work	9.2 Unilaterally dynamic work	9.3 Static or dynamic work postures	9.4 Combination of static/dynamic tasks		



Work area: Auto shop		Autohaus Europa	
Occupational category: Automotive electromechanical engineer			
Task: Battery service		Person in charge: _____	

Information	Identified hazards and their descriptions	Risk			Measures	Issuer/Advisor	Date	Applicable	
		H	M	L				Finished	Yes
BGI 808	<input type="checkbox"/> Risk of explosion due to the formation of potentially explosive mixtures (explosive gases)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> Charging rooms sufficiently ventilated (vertical transverse system) <input type="checkbox"/> Charge voltage limited as per manufacturer specifications to prevent overcharging batteries <input type="checkbox"/> Smoking prohibited <input type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>
BGR 157	<input type="checkbox"/> Risk of electric arc discharge	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> Use of safe/reliable chargers with on/off switches <input type="checkbox"/> Jump-start cable connected/disconnected in correct order <input type="checkbox"/> Use of insulated tools only <input type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>
BGR 192 BG-73.31	<input type="checkbox"/> Risk of chemical burns caused by electrolyte	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> Use of battery syringe, carboy tip cart made of break-proof material <input type="checkbox"/> Use of suitable personal protection equipment (face and eye protection, acid-resistant gloves and aprons) <input type="checkbox"/> First-aid kit and equipment available <input type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/> Risk to human health and the environment due to leakage of battery electrolyte	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> Use of hazardous materials box for old batteries <input type="checkbox"/> Storage of battery electrolyte in tiled areas, rooms with floor liners, or tanks <input type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>





Wear protective
goggles



Wear
hard hat



Wear
ear protection



Wear breathing
equipment



Wear protective
shoes/boots



Wear protective
gloves





Not pedestrians



No extinguishing
with water



No eating
or drinking



Not drinking
water



No fire, open flames
or smoking



Authorised
personnel only





Toxic
substances



Explosive
substances



Flammable
substances



Dangerous
voltage



Caustic
substances



Substances
harmful to health
or irritants



First Aid



Arrow indicating
escape route



Stretcher



Escape route
left



Escape route
via exit



Gases under pressure



Health hazard



Harmful to the environment













Toxic



Explosive



Flammable

Substances	Hazards (selection)	Symbol	Safety recommendations (selection)
Brake pads, clutch linings, grinding dust	Health hazard when dust particles are inhaled.	 Irritant	Use vacuum extraction to remove dust, then bind it with a suitable substance and store it in securely sealed containers.
Solvents, cleaning agents for parts	Materials pose a potential health hazard when inhaled or swallowed.	 Mildly toxic  Easily flammable	Avoid direct contact with the skin. Use protective skin cream. Keep away from sparks and flame, do not smoke.
Fuels for spark-ignition engines	Explosive, highly flammable. Toxic when inhaled, ingested or in case of contact with the skin. Carcinogenic.	 Highly flammable  Toxic	Keep away from sparks and flame, do not smoke. Do not inhale fumes. Avoid contact with skin and eyes. Use protective skin cream. Never use as a cleanser.
Battery electrolyte	Caustic hazard to skin and eyes (danger of blindness). Irritates and damages mucous membranes in respiratory passages when inhaled.	 Caustic	Avoid direct skin contact. Keep shipping containers closed. Store in original containers only. Wear gloves, as well as eye and face protection where required. Ensure that the work area is well ventilated.
Engine oils of known and unknown origin, diesel fuel, gear oil.	Avoid repeated skin contact extending over long periods. Engine oil of unknown origin is assigned to Hazardous Material Class A1.	 Irritant  Easily flammable	Use protective skin cream. In case of contact with skin or clothing, wash thoroughly using plenty of water. Keep well away from sparks and flame.
Box-section wax, undercoating, shipping wax, paint, paint residue, adhesives	Flammable. When inhaled, irritation and rashes affecting skin, mucous membranes, eyes and respiratory passages are possible; may also produce a numbing effect.	 Easily flammable  Mildly toxic	Keep well away from sparks and flame. Ensure that the work area is well ventilated. Stored in tightly sealed containers in a well-ventilated area. Use protective skin cream. Wear protective gloves, with safety glasses or protective goggles as indicated.

