

**SAFETY DATA SHEET**  
(REACH regulation (EC) n° 1907/2006 - n° 453/2010)

**SECTION 1 : IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING**

**1.1. Product identifier**

Product name : CHRYSO®Cure HPS  
Product code : D0110U.

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

Concrete and mortar admixture.

**1.3. Details of the supplier of the safety data sheet**

Registered company name : CHRYSO UK Ltd.  
Address : 1 Badby Park, Heartland Business Park.NN11 8YT.Daventry.United Kingdom.  
Telephone : +44 (0) 1327707976. Fax : +44 (0) 1327707968.  
uk.msds@chryso.com

**1.4. Emergency telephone number : 0870 600 6266.**

Association/Organisation : National Poisons Information Service.

**SECTION 2 : HAZARDS IDENTIFICATION**

**2.1. Classification of the substance or mixture**

**In compliance with EC regulation No. 1272/2008 and its amendments.**

Flammable liquid, Category 3 (Flam. Liq. 3, H226).  
Repeated exposure may cause skin dryness or cracking (EUH066).  
Specific target organ toxicity (single exposure), Category 3 (STOT SE 3, H335).  
Specific target organ toxicity (single exposure), Category 3 (STOT SE 3, H336).  
Aspiration hazard, Category 1 (Asp. Tox. 1, H304).  
Hazardous to the aquatic environment - Chronic hazard, Category 2 (Aquatic Chronic 2, H411).

**In compliance with directives 67/548/EEC, 1999/45/EC and their amendments.**

Flammable (R 10).  
This mixture represents an aspiration risk due to its low viscosity: harmful (Xn, R 65).  
Irritant for the respiratory tract (Xi, R 37).  
Repeated exposure may cause skin dryness or cracking (R 66).  
Vapours may cause drowsiness and dizziness (R 67).  
Aquatic environmental hazard, chronic toxicity: toxic (N, R 51/53).

**2.2. Label elements**

Mixture for spray application.

**In compliance with EC regulation No. 1272/2008 and its amendments.**

Hazard pictograms :



GHS09



GHS07



GHS08



GHS02

Signal Word :

DANGER

Product identifiers :

EC 918-481-9      HYDROCARBONS, C10-C13, ISOALKANES, CYCLICS, <2% AROMATICS  
EC 918-668-5      HYDROCARBURES, C9, AROMATIQUES  
EC 203-604-4      MESITYLENE

Hazard statements :

H226      Flammable liquid and vapour.  
H304      May be fatal if swallowed and enters airways.  
H335      May cause respiratory irritation.  
H336      May cause drowsiness or dizziness.

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H411	Toxic to aquatic life with long lasting effects.
EUH066	Repeated exposure may cause skin dryness or cracking.
Precautionary statements - Prevention :	
P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P261	Avoid breathing vapours/spray.
Precautionary statements - Response :	
P301 + P310	IF SWALLOWED: Immediately call a POISON CENTER/doctor/...
P312	Call a POISON CENTER/doctor/.../if you feel unwell.
P391	Collect spillage.
Precautionary statements - Storage :	
P405	Store locked up.

**2.3. Other hazards**

The mixture does not contain substances classified as 'Substances of Very High Concern' (SVHC)  $\geq 0.1\%$  published by the European Chemicals Agency (ECHA) under article 57 of REACH: <http://echa.europa.eu/fr/candidate-list-table>

The mixture satisfies neither the PBT nor the vPvB criteria for mixtures in accordance with annexe XIII of the REACH regulations EC 1907/2006.

**SECTION 3 : COMPOSITION/INFORMATION ON INGREDIENTS**

**3.2. Mixtures**

**Composition :**

Identification	(EC) 1272/2008	67/548/EEC	Note	%
EC: 918-481-9 HYDROCARBONS, C10-C13, ISOALKANES, CYCLICS, <2% AROMATICS	GHS08 Dgr Asp. Tox. 1, H304 EUH:066	Xn Xn;R65 R66		25 $\leq$ x % < 50
EC: 918-668-5 HYDROCARBURES, C9, AROMATIQUES	GHS09, GHS07, GHS08, GHS02 Dgr Flam. Liq. 3, H226 Asp. Tox. 1, H304 STOT SE 3, H335 STOT SE 3, H336 Aquatic Chronic 2, H411 EUH:066	Xn,N Xn;R65 Xi;R37 N;R51/53 R10 R66-R67		25 $\leq$ x % < 50
CAS: 108-67-8 EC: 203-604-4 MESITYLENE	GHS09, GHS02, GHS07 Wng Flam. Liq. 3, H226 STOT SE 3, H335 Aquatic Chronic 2, H411	Xi,N Xi;R37 N;R51/53 R10	[1]	2.5 $\leq$ x % < 10

**Information on ingredients :**

[1] Substance for which maximum workplace exposure limits are available.

**SECTION 4 : FIRST AID MEASURES**

As a general rule, in case of doubt or if symptoms persist, always call a doctor.

NEVER induce swallowing by an unconscious person.

**4.1. Description of first aid measures**

**In the event of exposure by inhalation :**

In the event of massive inhalation, remove the person exposed to fresh air. Keep warm and at rest.

If the person is unconscious, place in recovery position. Notify a doctor in all events, to ascertain whether observation and supportive hospital care will be necessary.

If breathing is irregular or has stopped, effect mouth-to-mouth resuscitation and call a doctor.

In the event of inhalation of spray mist, seek medical attention immediately, showing the packaging or label.

**In the event of splashes or contact with skin :**

Remove contaminated clothing and wash the skin thoroughly with soap and water or a recognised cleaner.

Watch out for any remaining product between skin and clothing, watches, shoes, etc.

If the contaminated area is widespread and/or there is damage to the skin, a doctor must be consulted or the patient transferred to hospital.

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**In the event of swallowing :**

Do not give the patient anything orally.

Seek medical attention, showing the label.

If swallowed accidentally, do not allow to drink, do not induce vomiting and transfer to hospital immediately by ambulance. Show the label to the doctor.

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

No data available.

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

No data available.

**SECTION 5 : FIREFIGHTING MEASURES**

Flammable.

Chemical powders, carbon dioxide and other extinguishing gas are suitable for small fires.

**5.1. Extinguishing media**

Keep packages near the fire cool, to prevent pressurised containers from bursting.

**Suitable methods of extinction**

In the event of a fire, use :

- foam
- powder

Prevent the effluent of fire-fighting measures from entering drains or waterways.

**Unsuitable methods of extinction**

In the event of a fire, do not use :

- water

**5.2. Special hazards arising from the substance or mixture**

A fire will often produce a thick black smoke. Exposure to decomposition products may be hazardous to health.

Do not breathe in smoke.

In the event of a fire, the following may be formed :

- carbon monoxide (CO)
- carbon dioxide (CO<sub>2</sub>)

**5.3. Advice for firefighters**

Fire-fighting personnel are to be equipped with autonomous insulating breathing apparatus.

**SECTION 6 : ACCIDENTAL RELEASE MEASURES**

**6.1. Personal precautions, protective equipment and emergency procedures**

Consult the safety measures listed under headings 7 and 8.

**For non first aid worker**

Avoid inhaling the vapors.

Avoid any contact with the skin and eyes.

If a large quantity has been spilt, evacuate all personnel and only allow intervention by trained operators equipped with safety apparatus.

**For first aid worker**

First aid workers will be equipped with suitable personal protective equipment (See section 8).

**6.2. Environmental precautions**

Contain and control the leaks or spills with non-combustible absorbent materials such as sand, earth, vermiculite, diatomaceous earth in drums for waste disposal.

Prevent any material from entering drains or waterways.

If the product contaminates waterways, rivers or drains, alert the relevant authorities in accordance with statutory procedures

Use drums to dispose of collected waste in compliance with current regulations (see section 13).

**6.3. Methods and material for containment and cleaning up**

Clean preferably with a detergent, do not use solvents.

**6.4. Reference to other sections**

No data available.

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**SECTION 7 : HANDLING AND STORAGE**

Requirements relating to storage premises apply to all facilities where the mixture is handled.

**7.1. Precautions for safe handling**

Always wash hands after handling.

Remove and wash contaminated clothing before re-using.

Remove contaminated clothing and protective equipment before entering eating areas.

**Fire prevention :**

Handle in well-ventilated areas.

Prevent the formation of flammable or explosive concentrations in air and avoid vapor concentrations higher than the occupational exposure limits.

Never inhale this mixture.

Prevent the accumulation of electrostatic charges with connections to earth.

The mixture can become electrostatically charged : always earth during decanting operations. Wear antistatic shoes and clothing and floors should be electrically conductive.

Use the mixture in premises free of naked flames or other sources of ignition and ensure that electrical equipment is suitably protected.

Keep packages tightly closed and away from sources of heat, sparks and naked flames.

Do not use tools which may produce sparks. Do not smoke.

Prevent access by unauthorised personnel.

**Recommended equipment and procedures :**

For personal protection, see section 8.

Observe precautions stated on label and also industrial safety regulations.

Avoid inhaling vapors.

Avoid inhaling vapors. Carry out any industrial operation which may give rise to this in a sealed apparatus.

Provide vapor extraction at the emission source and also general ventilation of the premises.

Also provide breathing apparatus for certain short tasks of an exceptional nature and for emergency interventions.

In all cases, recover emissions at source.

**Prohibited equipment and procedures :**

No smoking, eating or drinking in areas where the mixture is used.

Never open the packages under pressure.

**7.2. Conditions for safe storage, including any incompatibilities**

No data available.

**Storage**

Keep the container tightly closed in a dry, well-ventilated place.

Keep away from food and drink, including those for animals.

Keep away from all sources of ignition - do not smoke.

Keep well away from all sources of ignition, heat and direct sunlight.

Avoid accumulation of electrostatic charges.

**Packaging**

Always keep in packaging made of an identical material to the original.

**7.3. Specific end use(s)**

No data available.

**SECTION 8 : EXPOSURE CONTROLS/PERSONAL PROTECTION**

**8.1. Control parameters**

**Occupational exposure limits :**

- European Union (2009/161/EU, 2006/15/EC, 2000/39/EC, 98/24/EC)

CAS	VME-mg/m3	VME-ppm	VLE-mg/m3	VLE-ppm	Notes
108-67-8	100	20	-	-	-

- France (INRS - ED984 :2008) :

CAS	VME-ppm	VME-mg/m3	VLE-ppm	VLE-mg/m3	Notes	TMP No
108-67-8	20	100	50	250	-	84

- UK / WEL (Workplace exposure limits, EH40/2005, 2007) :

CAS	TWA	STEL	Ceiling	Definition	Criteria
108-67-8	25 ppm	-	-	-	-

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## 8.2. Exposure controls

### Personal protection measures, such as personal protective equipment

Pictogram(s) indicating the obligation of wearing personal protective equipment (PPE) :



Use personal protective equipment that is clean and has been properly maintained.

Store personal protective equipment in a clean place, away from the work area.

Never eat, drink or smoke during use. Remove and wash contaminated clothing before re-using. Ensure that there is adequate ventilation, especially in confined areas.

#### - Eye / face protection

Avoid contact with eyes.

Use eye protectors designed to protect against liquid splashes

Before handling, wear safety goggles in accordance with standard EN166.

#### - Hand protection

Use suitable protective gloves that are resistant to chemical agents in accordance with standard EN374.

Gloves must be selected according to the application and duration of use at the workstation.

Protective gloves need to be selected according to their suitability for the workstation in question : other chemical products that may be handled, necessary physical protections (cutting, pricking, heat protection), level of dexterity required.

Recommended properties :

- Impervious gloves in accordance with standard EN374

#### - Body protection

Avoid skin contact.

Wear suitable protective clothing.

Suitable type of protective clothing :

In the event of substantial spatter, wear liquid-tight protective clothing against chemical risks (type 3) in accordance with EN14605 to prevent skin contact.

In the event of a risk of splashing, wear protective clothing against chemical risks (type 6) in accordance with EN13034 to prevent skin contact.

Work clothing worn by personnel shall be laundered regularly.

After contact with the product, all parts of the body that have been soiled must be washed.

#### - Respiratory protection

Avoid breathing vapours.

If the ventilation is insufficient, wear appropriate breathing apparatus.

When workers are confronted with concentrations that are above occupational exposure limits, they must wear a suitable, approved, respiratory protection device.

Anti-gas and vapour filter(s) (Combined filters) in accordance with standard EN14387 :

- A1 (Brown)

## SECTION 9 : PHYSICAL AND CHEMICAL PROPERTIES

### 9.1. Information on basic physical and chemical properties

#### General information :

Physical state :	Fluid liquid.
Odour	Characteristic
Colour	Pale yellow

#### Important health, safety and environmental information

pH :	Not relevant.
Boiling point/boiling range :	Not relevant.
Flash Point :	40.00 °C.
Vapour pressure (50°C) :	Not relevant.
Density :	< 1
Water solubility :	Insoluble.
Viscosity:	$\nu < 7 \text{ mm}^2/\text{s}$ (40°C)
Melting point/melting range :	Not relevant.
Self-ignition temperature :	Not relevant.

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Decomposition point/decomposition range : Not relevant.

**9.2. Other information**

No data available.

**SECTION 10 : STABILITY AND REACTIVITY**

**10.1. Reactivity**

No data available.

**10.2. Chemical stability**

This mixture is stable under the recommended handling and storage conditions in section 7.

**10.3. Possibility of hazardous reactions**

No data available.

**10.4. Conditions to avoid**

Any apparatus likely to produce a flame or to have a metallic surface at high temperature (burners, electric arcs, furnaces etc.) must not be allowed on the premises.

Avoid :

- accumulation of electrostatic charges.
- heating
- heat
- flames and hot surfaces

**10.5. Incompatible materials**

Keep away from :

- oxidising material

**10.6. Hazardous decomposition products**

The thermal decomposition may release/form :

- carbon monoxide (CO)
- carbon dioxide (CO<sub>2</sub>)

**SECTION 11 : TOXICOLOGICAL INFORMATION**

**11.1. Information on toxicological effects**

Repeated or prolonged contact with the mixture may cause removal of natural oil from the skin resulting in non-allergic contact dermatitis and absorption through the skin.

Respiratory tract irritation may occur, together with symptoms such as coughing, choking and breathing difficulties.

Narcotic effects may occur, such as drowsiness, narcosis, decreased alertness, loss of reflexes, lack of coordination or dizziness.

Effects may also occur in the form of violent headaches or nausea, judgement disorder, giddiness, irritability, fatigue or memory disturbance.

Aspiration toxicity includes severe acute effects such as chemical pneumonia, varying degrees of pulmonary injury or death following aspiration.

**11.1.1. Substances**

**Acute toxicity :**

**HYDROCARBURES, C9, AROMATIQUES**

Oral route :	LD50 = 3492 mg/kg Species : Rat
Dermal route :	LD50 > 3160 mg/kg Species : Rabbit
Inhalation route :	LC50 > 6193 mg/m <sup>3</sup> Species : Rat OECD Guideline 403 (Acute Inhalation Toxicity)

**HYDROCARBONS, C10-C13, ISOALKANES, CYCLICS, <2% AROMATICS**

Oral route :	LD50 > 5000 mg/kg Species : Rat OECD Guideline 401 (Acute Oral Toxicity)
Dermal route :	LD50 > 2000 mg/kg Species : Rat

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OECD Guideline 434 (Acute Dermal Toxicity Fixed Dose Procedure)

Inhalation route : LC50 > 5000 mg/l  
Species : Rat

**11.1.2. Mixture**

**Aspiration hazard :**

May be fatal if swallowed and enters airways.

Aspiration toxicity includes severe acute effects such as chemical pneumonia, varying degrees of pulmonary injury or death following aspiration.

**SECTION 12 : ECOLOGICAL INFORMATION**

Toxic to aquatic life with long lasting effects.

The product must not be allowed to run into drains or waterways.

**12.1. Toxicity**

**12.1.1. Substances**

HYDROCARBONS, C10-C13, ISOALKANES, CYCLICS, <2% AROMATICS

Fish toxicity : Duration of exposure : 21 days

Crustacean toxicity : NOEC = 0.18 mg/l  
Species : Daphnia magna  
Duration of exposure : 21 days

MESITYLENE (CAS: 108-67-8)

Fish toxicity : LC50 = 8.6 mg/l  
Species : Oryzias latipes  
Duration of exposure : 96 h

Crustacean toxicity : EC50 = 6 mg/l  
Duration of exposure : 48 h

NOEC = 0.4 mg/l  
Species : Daphnia magna  
Duration of exposure : 21 days

Algae toxicity : ECr50 = 25 mg/l  
Species : Scenedesmus subspicatus  
Duration of exposure : 72 h

HYDROCARBURES, C9, AROMATIQUES

Fish toxicity : LC50 = 9.2 mg/l  
Species : Oncorhynchus mykiss  
Duration of exposure : 96 h  
OECD Guideline 203 (Fish, Acute Toxicity Test)

Crustacean toxicity : EC50 = 3.2 mg/l  
Species : Daphnia magna  
Duration of exposure : 48 h  
OECD Guideline 202 (Daphnia sp. Acute Immobilisation Test)

Algae toxicity : ECr50 = 2.9 mg/l  
Species : Pseudokirchnerella subcapitata  
Duration of exposure : 72 h  
OECD Guideline 201 (Alga, Growth Inhibition Test)

**12.1.2. Mixtures**

No aquatic toxicity data available for the mixture.

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**12.2. Persistence and degradability**

**12.2.1. Substances**

MESITYLENE (CAS: 108-67-8)

Biodegradability :

no degradability data is available, the substance is considered as not degrading quickly.

HYDROCARBURES, C9, AROMATIQUES

Biodegradability :

no degradability data is available, the substance is considered as not degrading quickly.

HYDROCARBONS, C10-C13, ISOALKANES, CYCLICS, <2% AROMATICS

Biodegradability :

no degradability data is available, the substance is considered as not degrading quickly.

**12.3. Bioaccumulative potential**

No data available.

**12.4. Mobility in soil**

No data available.

**12.5. Results of PBT and vPvB assessment**

No data available.

**12.6. Other adverse effects**

No data available.

**SECTION 13 : DISPOSAL CONSIDERATIONS**

Proper waste management of the mixture and/or its container must be determined in accordance with Directive 2008/98/EC.

**13.1. Waste treatment methods**

Do not pour into drains or waterways.

**Waste :**

Waste management is carried out without endangering human health, without harming the environment and, in particular without risk to water, air, soil, plants or animals.

Recycle or dispose of waste in compliance with current legislation, preferably via a certified collector or company.

Do not contaminate the ground or water with waste, do not dispose of waste into the environment.

**Soiled packaging :**

Empty container completely. Keep label(s) on container.

Give to a certified disposal contractor.

**SECTION 14 : TRANSPORT INFORMATION**

Transport product in compliance with provisions of the ADR for road, RID for rail, IMDG for sea and ICAO/IATA for air transport (ADR 2013 - IMDG 2012 - ICAO/IATA 2014).

**14.1. UN number**

1268

**14.2. UN proper shipping name**

UN1268=PETROLEUM DISTILLATES, N.O.S. or PETROLEUM PRODUCTS, N.O.S.

**14.3. Transport hazard class(es)**

- Classification :



3

**14.4. Packing group**

III



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#### 14.5. Environmental hazards

- Environmentally hazardous material :



#### 14.6. Special precautions for user

ADR/RID	Class	Code	Pack gr.	Label	Ident.	LQ	Provis.	EQ	Cat.	Tunnel
	3	F1	III	3	30	5 L	363	E1	3	D/E

IMDG	Class	2°Label	Pack gr.	LQ	EMS	Provis.	EQ
	3	-	III	5 L	F-E,S-E	223 363 955	E1

IATA	Class	2°Label	Pack gr.	Passager	Passager	Cargo	Cargo	note	EQ
	3	-	III	355	60 L	366	220 L	A3	E1
	3	-	III	Y344	10 L	-	-	A3	E1

For limited quantities, see part 2.7 of the OACI/IATA and chapter 3.4 of the ADR and IMDG.

For excepted quantities, see part 2.6 of the OACI/IATA and chapter 3.5 of the ADR and IMDG.

#### 14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

No data available.

### SECTION 15 : REGULATORY INFORMATION

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

##### - Classification and labelling information included in section 2:

The following regulations have been used:

- Directive 67/548/EEC and its adaptations
- Directive 1999/45/EC and its adaptations
- EU Regulation No. 1272/2008 amended by EU Regulation No. 487/2013.
- EU Regulation No. 1272/2008 amended by EU Regulation No. 758/2013.
- EU Regulation No. 1272/2008 amended by EU Regulation No. 944/2013.
- EU Regulation No. 1272/2008 amended by EU Regulation No. 605/2014.

##### - Container information:

No data available.

##### - Particular provisions :

No data available.

#### 15.2. Chemical safety assessment

No data available.

### SECTION 16 : OTHER INFORMATION

Since the user's working conditions are not known by us, the information supplied on this safety data sheet is based on our current level of knowledge and on national and community regulations.

The mixture must not be used for other uses than those specified in section 1 without having first obtained written handling instructions.

It is at all times the responsibility of the user to take all necessary measures to comply with legal requirements and local regulations.

The information in this safety data sheet must be regarded as a description of the safety requirements relating to the mixture and not as a guarantee of the properties thereof.

#### In compliance with directives 67/548/EEC, 1999/45/EC and their amendments.

Hazard symbols :



Harmful



Dangerous for the environment

Flammable

Contains :

EC 918-481-9

HYDROCARBONS, C10-C13, ISOALKANES, CYCLICS, <2% AROMATICS

EC 918-668-5

HYDROCARBURES, C9, AROMATIQUES

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**Risk phrase :**

R 51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.  
R 37 Irritating to respiratory system.  
R 10 Flammable.  
R 65 Harmful: may cause lung damage if swallowed.  
R 66 Repeated exposure may cause skin dryness or cracking.  
R 67 Vapours may cause drowsiness and dizziness.

**Safety phrase :**

S 23 Do not breathe spray.  
S 23 Do not breathe gas/fumes/vapour/spray (appropriate wording to be specified by the manufacturer).  
S 23 Do not breathe gas/fumes/vapour/spray (appropriate wording to be specified by the manufacturer).  
S 61 Avoid release to the environment. Refer to special instructions/Safety data sheets.  
S 60 This material and its container must be disposed of as hazardous waste.  
S 62 If swallowed, do not induce vomiting: seek medical advice immediately and show this container or label.  
S 29 Do not empty into drains.  
S 57 Use appropriate container to avoid environmental contamination.

**Title for H, EUH and R indications mentioned in section 3 :**

H226 Flammable liquid and vapour.  
H304 May be fatal if swallowed and enters airways.  
H335 May cause respiratory irritation.  
H336 May cause drowsiness or dizziness.  
H411 Toxic to aquatic life with long lasting effects.  
EUH066 Repeated exposure may cause skin dryness or cracking.  
R 10 Flammable.  
R 37 Irritating to respiratory system.  
R 51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.  
R 65 Harmful: may cause lung damage if swallowed.  
R 66 Repeated exposure may cause skin dryness or cracking.  
R 67 Vapours may cause drowsiness and dizziness.

**Abbreviations :**

ADR : European agreement concerning the international carriage of dangerous goods by Road.  
IMDG : International Maritime Dangerous Goods.  
IATA : International Air Transport Association.  
ICAO : International Civil Aviation Organisation  
RID : Regulations concerning the International carriage of Dangerous goods by rail.  
WGK : Wassergefährdungsklasse (Water Hazard Class).  
GHS02 : Flame  
GHS07 : Exclamation mark  
GHS08 : Health hazard  
GHS09 : Environment