

Date of issue: 12.11.2015

Version: 1

Date previous of issue: 11.08.2015

Conforms to Regulation (EC) No. 1907/2006 (REACH), Annex II, as amended by Regulation (EU) 2015/830

**SECTION 1: Identification of the substance/mixture and of the company/undertaking****1.1 Product identifier**

Product name : Knauf Firepaint Steel  
 Product identity : 4360010000  
 Product type : intumescent acrylic paint

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

Field of application : buildings  
 Identified uses : Professional applications, Used by spraying.

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

Manufacturer/Supplier: SIA Knauf  
 Daugavas iela 4,  
 Stopiņu nov., Saurieši  
 LV-2118, Latvija  
 Telephone: +371 67032999  
 www.knauf.lv  
 info@knauf.lv

**1.4 Emergency telephone number**

Emergency telephone number (with hours of operation)  
 Centre of Poisoning and Drug Information, Latvia:  
 +371 67042473 (24 h).  
 SIA Knauf: +371 67032999 (working hours)

**SECTION 2: Hazards identification****2.1 Classification of the substance or mixture**

Product definition : Mixture

**Classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]**

FLAMMABLE LIQUIDS - Category 3  
 SKIN CORROSION/IRRITATION - Category 2

See Section 11 for more detailed information on health effects and symptoms.

**2.2 Label elements**

Hazard pictograms :



Signal word : Warning  
 Hazard statements : H226 - Flammable liquid and vapor.  
 H315 - Causes skin irritation.

Precautionary statements :

Prevention : Avoid breathing vapors, spray or mists. Wear protective gloves/protective clothing/eye protection/face protection. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

Response : IF ON SKIN: Wash with plenty of soap and water. If skin irritation occurs: Get medical attention.

Storage : Keep cool.

Hazardous ingredients : xylene

Supplemental label elements :  Contains Octadecanoic acid, 12-hydroxy-, reaction products with ethylenediamine. May produce an allergic reaction.

**Special packaging requirements**

Containers to be fitted with child-resistant fastenings : Not applicable.

Tactile warning of danger : Not applicable.

**2.3 Other hazards**

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## SECTION 2: Hazards identification

Other hazards which do not result in classification : None known.

## SECTION 3: Composition/information on ingredients

### 3.2 Mixtures

Product/ingredient name	Identifiers	%	Regulation (EC) No. 1272/2008 [CLP]	Type
xylene	REACH #: 01-2119488216-32 EC: 215-535-7 CAS: 1330-20-7 Index: 601-022-00-9	>=20 - <25	Flam. Liq. 3, H226 Acute Tox. 4, H312 Acute Tox. 4, H332 Skin Irrit. 2, H315	c [1] [2]
ethylbenzene	REACH #: 01-2119489370-35 EC: 202-849-4 CAS: 100-41-4 Index: 601-023-00-4	>=3 - <7	Flam. Liq. 2, H225 Acute Tox. 4, H332 STOT RE 2, H373 (ears) Asp. Tox. 1, H304	- [1] [2]
octadecanoic acid, 12-hydroxy-, reaction products with ethylenediamine	REACH #: 01-2119979085-27 EC: 309-629-8 CAS: 100545-48-0	<0.25	Skin Sens. 1B, H317 Aquatic Chronic 3, H412	- [1]
See Section 16 for the full text of the H statements declared above.				

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

### Type

- [1] Substance classified with a health or environmental hazard  
 [2] Substance with a workplace exposure limit, see section 8.  
 [3] Substance meets the criteria for PBT according to Regulation (EC) No. 1907/2006, Annex XIII  
 [4] Substance meets the criteria for vPvB according to Regulation (EC) No. 1907/2006, Annex XIII  
 [5] Substance of equivalent concern

## SECTION 4: First aid measures

### 4.1 Description of first aid measures

General :	In all cases of doubt, or when symptoms persist, seek medical attention. Never give anything by mouth to an unconscious person.  If breathing is irregular, drowsiness, loss of consciousness or cramps: Call 112 and give immediate treatment (first aid).
Eye contact :	Check for and remove any contact lenses. Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. In all cases of doubt, or when symptoms persist, seek medical attention.
Inhalation :	Remove to fresh air. Keep person warm and at rest. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. Give nothing by mouth. If unconscious, place in recovery position and get medical attention immediately.
Skin contact :	Remove contaminated clothing and shoes. Wash skin thoroughly with soap and water or use recognized skin cleanser. Do NOT use solvents or thinners.
Ingestion :	If swallowed, seek medical advice immediately and show this container or label. Keep person warm and at rest. Do not induce vomiting unless directed to do so by medical personnel. Lower the head so that vomit will not re-enter the mouth and throat.
Protection of first-aiders :	No action shall be taken involving any personal risk or without suitable training. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.

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

#### Potential acute health effects

Eye contact :	Causes serious eye irritation.
Inhalation :	Exposure to decomposition products may cause a health hazard. Serious effects may be delayed following exposure.
Skin contact :	Causes skin irritation.
Ingestion :	Irritating to mouth, throat and stomach.

#### Over-exposure signs/symptoms

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## SECTION 4: First aid measures

Eye contact :	Adverse symptoms may include the following: pain or irritation watering redness
Inhalation :	No specific data.
Skin contact :	Adverse symptoms may include the following: irritation redness
Ingestion :	No specific data.

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

Notes to physician :	If gasses have been inhaled, from the decomposition of the product, symptoms may be delayed. Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
Specific treatments :	No specific treatment.

## SECTION 5: Firefighting measures

### 5.1 Extinguishing media

Extinguishing media :	Recommended: alcohol resistant foam, CO <sub>2</sub> , powders, water spray. Not to be used: waterjet.
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### 5.2 Special hazards arising from the substance or mixture

Hazards from the substance or mixture :	Flammable liquid and vapor. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion. Runoff to sewer may create fire or explosion hazard.
Hazardous combustion products :	Decomposition products may include the following materials: carbon oxides nitrogen oxides halogenated compounds metal oxide/oxides

### 5.3 Advice for firefighters

Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Fire will produce dense black smoke. Exposure to decomposition products may cause a health hazard. Cool closed containers exposed to fire with water. Do not release runoff from fire to drains or watercourses. Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode. Clothing for fire-fighters (including helmets, protective boots and gloves) conforming to European standard EN 469 will provide a basic level of protection for chemical incidents.

## SECTION 6: Accidental release measures

### 6.1 Personal precautions, protective equipment and emergency procedures

Avoid all direct contact with the spilled material. Exclude sources of ignition and be aware of explosion hazard. Ventilate the area. Avoid breathing vapor or mist. Refer to protective measures listed in sections 7 and 8. No action shall be taken involving any personal risk or without suitable training. If the product contaminates lakes, rivers, or sewers, inform the appropriate authorities in accordance with local regulations.

### 6.2 Environmental precautions

Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

### 6.3 Methods and materials for containment and cleaning up

Stop leak if without risk. Move containers from spill area. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Use spark-proof tools and explosion-proof equipment. Contaminated absorbent material may pose the same hazard as the spilled product.

### 6.4 Reference to other sections

## SECTION 6: Accidental release measures

See Section 1 for emergency contact information.  
See Section 8 for information on appropriate personal protective equipment.  
See Section 13 for additional waste treatment information.

## SECTION 7: Handling and storage

### 7.1 Precautions for safe handling

Vapors are heavier than air and may spread along floors. Vapors may form explosive mixtures with air. Prevent the creation of flammable or explosive concentrations of vapors in air and avoid vapor concentrations higher than the occupational exposure limits. In addition, the product should be used only in areas from which all naked lights and other sources of ignition have been excluded. Electrical equipment should be protected to the appropriate standard. To dissipate static electricity during transfer, ground drum and connect to receiving container with bonding strap. No sparking tools should be used.

Avoid inhalation of vapour, dust and spray mist. Avoid contact with skin and eyes. Eating, drinking and smoking should be prohibited in area where this material is handled, stored and processed. Appropriate personal protective equipment: see Section 8. Always keep in containers made from the same material as the original one.

### 7.2 Conditions for safe storage, including any incompatibilities

Store in accordance with local regulations. Store in a cool, well-ventilated area away from incompatible materials and ignition sources. Keep out of the reach of children. Keep away from: Oxidizing agents, strong alkalis, strong acids. No smoking. Prevent unauthorized access. Containers that are opened must be carefully resealed and kept upright to prevent leakage.

### 7.3 Specific end use(s)

See separate Product Data Sheet for recommendations or industrial sector specific solutions.

## SECTION 8: Exposure controls/personal protection

### 8.1 Control parameters

Product/ingredient name	Exposure limit values
xylene	<b>EU OEL (Europe, 12/2009). Absorbed through skin.</b> STEL: 442 mg/m <sup>3</sup> 15 minutes. STEL: 100 ppm 15 minutes. TWA: 221 mg/m <sup>3</sup> 8 hours. TWA: 50 ppm 8 hours.
ethylbenzene	<b>EU OEL (Europe, 12/2009). Absorbed through skin.</b> STEL: 884 mg/m <sup>3</sup> 15 minutes. STEL: 200 ppm 15 minutes. TWA: 442 mg/m <sup>3</sup> 8 hours. TWA: 100 ppm 8 hours.

### Recommended monitoring procedures

If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment. Reference should be made to monitoring standards, such as the following: European Standard EN 689 (Workplace atmospheres - Guidance for the assessment of exposure by inhalation to chemical agents for comparison with limit values and measurement strategy) European Standard EN 14042 (Workplace atmospheres - Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents) European Standard EN 482 (Workplace atmospheres - General requirements for the performance of procedures for the measurement of chemical agents) Reference to national guidance documents for methods for the determination of hazardous substances will also be required.

### Derived effect levels

No DNELs/DMELs available.

### Predicted effect concentrations

No PNECs available.

### 8.2 Exposure controls

#### Appropriate engineering controls

Arrange sufficient ventilation by local exhaust ventilation and good general ventilation to keep the airborne concentrations of vapors or dust lowest possible and below their respective threshold limit value. Ensure that eyewash stations and safety showers are proximal to the work-station location.

#### Individual protection measures

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## SECTION 8: Exposure controls/personal protection

**General :** Gloves must be worn for all work that may result in soiling. Apron/coveralls/protective clothing must be worn when soiling is so great that regular work clothes do not adequately protect skin against contact with the product. Safety eyewear should be used when there is a likelihood of exposure.



**Hygiene measures :** Wash hands, forearms, and face thoroughly after handling compounds and before eating, smoking, using lavatory, and at the end of day.

**Eye/face protection :** Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: chemical splash goggles.

**Hand protection :** Wear chemical-resistant gloves (tested to EN374) in combination with 'basic' employee training. The quality of the chemical-resistant protective gloves must be chosen as a function of the specific workplace concentrations and quantity of hazardous substances.  
Since the actual work situation is unknown. Supplier of gloves should be contacted in order to find the appropriate type. Below listed glove(s) should be regarded as generic advice:  
  
Recommended: Silver Shield / 4H gloves, polyvinyl alcohol (PVA), Viton®  
Not recommended: nitrile rubber, neoprene rubber, butyl rubber, natural rubber (latex), polyvinyl chloride (PVC)

**Body protection :** Personal protective equipment for the body should be selected based on the task being performed and the risks involved handling this product.  
Wear suitable protective clothing. Always wear protective clothing when spraying.

**Respiratory protection :** If working areas have insufficient ventilation: When the product is applied by means that will not generate an aerosol such as, brush or roller wear half or totally covering mask equipped with gas filter of type A, when grinding use particle filter of type P. When the product is applied by spraying and for continuous or prolonged work always wear an air-fed respirator e.g. hood with supply of fresh or compressed air or a full face, powered air purifying filter. Be sure to use an approved/certified respirator or equivalent.

### Environmental exposure controls

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

**Physical state :** Liquid.

**Odor :** Solvent-like

**pH :** Testing not relevant or not possible due to nature of the product.

**Melting point/freezing point :** Testing not relevant or not possible due to nature of the product.

**Boiling point/boiling range :** Testing not relevant or not possible due to nature of the product.

**Flash point :** Closed cup: 23 °C (73.4 °F)

**Evaporation rate :** Testing not relevant or not possible due to nature of the product.

**Flammability :** Highly flammable in the presence of the following materials or conditions: open flames, sparks and static discharge and heat.

**Lower and upper explosive (flammable) limits :** 0.8 - 6.7 vol %

**Vapor pressure :** Testing not relevant or not possible due to nature of the product.

**Vapor density :** Testing not relevant or not possible due to nature of the product.

**Relative density :** 0.342 g/cm<sup>3</sup>

**Solubility(ies) :** Very slightly soluble in the following materials: cold water and hot water.

**Partition coefficient (LogKow) :** Testing not relevant or not possible due to nature of the product.

**Auto-ignition temperature :** Lowest known value: 432 °C (809.6 °F) (xylene).

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## SECTION 9: Physical and chemical properties

Decomposition temperature :	Testing not relevant or not possible due to nature of the product.
Viscosity :	Testing not relevant or not possible due to nature of the product.
Explosive properties :	Highly explosive in the presence of the following materials or conditions: open flames, sparks and static discharge and heat.
Oxidizing properties :	Testing not relevant or not possible due to nature of the product.

### 9.2 Other information

Solvent(s) % by weight :	Weighted average: 26 %
Water % by weight :	Weighted average: 0 %
VOC content :	320 g/l (Measured)
VOC content, Ready-for-use mixture :	310 g/l [ISO 11890-1]
Solvent Gas :	Weighted average: 0.078 m <sup>3</sup> /l

## SECTION 10: Stability and reactivity

### 10.1 Reactivity

No specific test data related to reactivity available for this product or its ingredients.

### 10.2 Chemical stability

The product is stable.

### 10.3 Possibility of hazardous reactions

Under normal conditions of storage and use, hazardous reactions will not occur.

### 10.4 Conditions to avoid

Avoid all possible sources of ignition (spark or flame). Do not pressurize, cut, weld, braze, solder, drill, grind or expose containers to heat or sources of ignition.

### 10.5 Incompatible materials

Highly reactive or incompatible with the following materials: oxidizing materials.  
Reactive or incompatible with the following materials: reducing materials.

### 10.6 Hazardous decomposition products

When exposed to high temperatures (i.e. in case of fire) harmful decomposition products may be formed:

Decomposition products may include the following materials: carbon oxides nitrogen oxides halogenated compounds metal oxide/oxides

## SECTION 11: Toxicological information

### 11.1 Information on toxicological effects

Exposure to component solvent vapor concentrations may result in adverse health effects such as mucous membrane and respiratory system irritation and adverse effects on the kidneys, liver and central nervous system. Solvents may cause some of the above effects by absorption through the skin. Symptoms and signs include headaches, dizziness, fatigue, muscular weakness, drowsiness and, in extreme cases, loss of consciousness. Repeated or prolonged contact with the preparation may cause removal of natural fat from the skin, resulting in non-allergic contact dermatitis and absorption through the skin. If splashed in the eyes, the liquid may cause irritation and reversible damage. Accidental swallowing may cause stomach pain. Chemical lung inflammation may occur if the product is taken into the lungs via vomiting.

#### Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
xylene  ethylbenzene	LC50 Inhalation Gas.	Rat	5000 ppm	4 hours
	LC50 Inhalation Vapor	Rat	6350 ppm	4 hours
	LD50 Oral	Rat	4300 mg/kg	-
	LD50 Dermal	Rabbit	>5000 mg/kg	-
	LD50 Oral	Rat	3500 mg/kg	-

#### Acute toxicity estimates

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**SECTION 11: Toxicological information**

Route	ATE value
<input checked="" type="checkbox"/> Dermal <input type="checkbox"/> Inhalation (gases) <input type="checkbox"/> Inhalation (vapors)	5908.5 mg/kg 21590.7 ppm 48.45 mg/l

**Irritation/Corrosion**

Product/ingredient name	Result	Species	Score	Exposure
<input checked="" type="checkbox"/> xylene	Eyes - Severe irritant	Rabbit	-	24 hours 5 milligrams
ethylbenzene	Skin - Moderate irritant	Rabbit	-	24 hours 500 milligrams
	Skin - Mild irritant	Rabbit	-	24 hours 15 milligrams
	Respiratory - Mild irritant	Rabbit	-	-
	Eyes - Mild irritant	Rabbit	-	-
octadecanoic acid, 12-hydroxy-, reaction products with ethylenediamine	Skin - Mild irritant	Rabbit	-	-
	Eyes - Mild irritant	Rabbit	-	-

**Sensitizer**

Product/ingredient name	Route of exposure	Species	Result
<input checked="" type="checkbox"/> octadecanoic acid, 12-hydroxy-, reaction products with ethylenediamine	skin	Guinea pig	Sensitizing

**Specific target organ toxicity (single exposure)**

Product/ingredient name	Category	Route of exposure	Target organs
No known data available in our database.			

**Specific target organ toxicity (repeated exposure)**

Product/ingredient name	Category	Route of exposure	Target organs
ethylbenzene	Category 2	Not determined	ears

**Aspiration hazard**

Product/ingredient name	Result
ethylbenzene	ASPIRATION HAZARD - Category 1

**Information on the likely routes of exposure**

Routes of entry anticipated: Oral, Dermal, Inhalation.

**Potential chronic health effects**Sensitization :  Contains Octadecanoic acid, 12-hydroxy-, reaction products with ethylenediamine. May produce an allergic reaction.

Other information : No additional known significant effects or critical hazards.

**SECTION 12: Ecological information****12.1 Toxicity**

Do not allow to enter drains or watercourses.

Product/ingredient name	Result	Species	Exposure
<input checked="" type="checkbox"/> ethylbenzene	Chronic NOEC <1000 µg/l Freshwater	Algae - Pseudokirchneriella subcapitata	96 hours

**12.2 Persistence and degradability**

Product/ingredient name	Test	Result	Dose	Inoculum
<input checked="" type="checkbox"/> xylene	-	>60 % - Readily - 28 days	-	-
ethylbenzene	-	>70 % - Readily - 28 days	-	-
octadecanoic acid, 12-hydroxy-, reaction products with ethylenediamine	OECD 301D Ready Biodegradability - Closed Bottle Test	22 % - Not readily - 28 days	-	-

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**SECTION 12: Ecological information**

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
xylene ethylbenzene octadecanoic acid, 12-hydroxy-, reaction products with ethylenediamine	- - -	- - -	Readily Readily Not readily

**12.3 Bioaccumulative potential**

Product/ingredient name	LogP <sub>ow</sub>	BCF	Potential
xylene ethylbenzene octadecanoic acid, 12-hydroxy-, reaction products with ethylenediamine	3.12 3.6 5.86	8.1 - 25.9 - -	low low high

**12.4 Mobility in soil**Soil/water partition coefficient (K<sub>oc</sub>) : No known data available in our database.

Mobility : No known data available in our database.

**12.5 Results of PBT and vPvB assessment**

PBT : Not applicable.

vPvB : Not applicable.

**12.6 Other adverse effects**

No known significant effects or critical hazards.

**SECTION 13: Disposal considerations****13.1 Waste treatment methods**

The generation of waste should be avoided or minimized wherever possible. Residues of the product is listed as hazardous waste. Dispose of according to all state and local applicable regulations. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Spillage, remains, discarded clothes and similar should be discarded in a fireproof container.

European waste catalogue no. (EWC) is given below.

European waste catalogue (EWC) : 08 01 11\*

**Packaging**

The generation of waste should be avoided or minimized wherever possible. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible.

**SECTION 14: Transport information**

Transport may take place according to national regulation or ADR for transport by road, RID for transport by train, IMDG for transport by sea, IATA for transport by air.

	14.1 UN no.	14.2 Proper shipping name	14.3 Transport hazard class(es)	14.4 PG*	14.5 Env* Additional information
<b>ADR/RID Class</b>	UN1263	PAINT	3 	III	No. <b>Special provisions</b> 640 (E)  <b>Tunnel code</b> (D/E)
<b>IMDG Class</b>	UN1263	PAINT	3 	III	No. <b>Emergency schedules (EmS)</b> F-E, S-E

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**SECTION 14: Transport information**

<b>IATA Class</b>	UN1263	PAINT	3		III	No. -
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PG\* : Packing group

Env.\* : Environmental hazards

**14.6 Special precautions for user**

**Transport within user's premises:** always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

**14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code**

Not applicable.

**SECTION 15: Regulatory information****15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**

EU Regulation (EC) No. 1907/2006 (REACH) Annex XIV - List of substances subject to authorization - Substances of very high concern

**Annex XIV**

None of the components are listed.

**Substances of very high concern**

None of the components are listed.

Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles

Not applicable.

**Other EU regulations****Seveso category**

This product is controlled under the Seveso III Directive.

**Seveso category**

P5c: Flammable liquids 2 and 3 not falling under P5a or P5b

C6: Flammable (R10)

**15.2 Chemical Safety Assessment**

This product contains substances for which Chemical Safety Assessments are still required.

**SECTION 16: Other information**

Abbreviations and acronyms :

ATE = Acute Toxicity Estimate  
 CLP = Classification, Labelling and Packaging Regulation [Regulation (EC) No. 1272/2008]  
 EUH statement = CLP-specific Hazard statement  
 RRN = REACH Registration Number  
 DNEL = Derived No Effect Level  
 PNEC = Predicted No Effect Concentration

Full text of abbreviated H statements:

~~H~~225 Highly flammable liquid and vapor.  
 H226 Flammable liquid and vapor.  
 H304 May be fatal if swallowed and enters airways.  
 H312 (dermal) Harmful in contact with skin.  
 H315 Causes skin irritation.  
 H317 May cause an allergic skin reaction.  
 H332 (inhalation) Harmful if inhaled.  
 H373 (ears) May cause damage to organs through prolonged or repeated exposure. (ears)  
 H412 Harmful to aquatic life with long lasting effects.

Full text of classifications [CLP/GHS]:

~~A~~cute Tox. 4, H312 ACUTE TOXICITY (dermal) - Category 4  
 Acute Tox. 4, H332 ACUTE TOXICITY (inhalation) - Category 4  
 Aquatic Chronic 3, H412 AQUATIC HAZARD (LONG-TERM) - Category 3  
 Asp. Tox. 1, H304 ASPIRATION HAZARD - Category 1  
 Flam. Liq. 2, H225 FLAMMABLE LIQUIDS - Category 2  
 Flam. Liq. 3, H226 FLAMMABLE LIQUIDS - Category 3  
 Skin Irrit. 2, H315 SKIN CORROSION/IRRITATION - Category 2  
 Skin Sens. 1B, H317 SKIN SENSITIZATION - Category 1B  
 STOT RE 2, H373 (ears) SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) (ears) - Category 2

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**SECTION 16: Other information****Procedure used to derive the classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]**

Classification	Justification
FLAMMABLE LIQUIDS - Category 3 SKIN CORROSION/IRRITATION - Category 2	On basis of test data Calculation method

**Notice to reader**

✔ Indicates information that has changed from previously issued version.

The information contained in this safety data sheet is based on the present state of knowledge and EU and national legislation. It provides guidance on health, safety and environmental aspects for handling the product in a safe way and should not be construed as any guarantee of the technical performance or suitability for particular applications.

It is always the duty of the user/employer to ascertain that the work is planned and carried out in accordance with the national regulations.