

**Safety Data Sheet**

according to Regulation (EC) No 1907/2006

**TUDAMELT 45/47**

Revision date: 25.11.2022

Page 1 of 11

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

TUDAMELT 45/47

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

Industrial uses

**Uses advised against**

none

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

Company name: H&amp;R Wax &amp; Specialties GmbH

Street: Am Sandtorkai 64

Place: D-20457 Hamburg

Telephone: +49(0)40-43218-0

Telefax: +49(0)40-43218-400

Responsible Department: Abt. Produktsicherheit: info.reach@hur.com

**1.4. Emergency telephone**

+49 551 19240, GIZ-Nord, Göttingen, Deutschland

**number:****SECTION 2: Hazards identification****2.1. Classification of the substance or mixture****Regulation (EC) No 1272/2008**

This mixture is not classified as hazardous in accordance with Regulation (EC) No 1272/2008.

**2.2. Label elements****Additional advice on labelling**

none

**2.3. Other hazards**

Do not allow uncontrolled discharge of product into the environment.

The substances in the mixture do not meet the PBT/vPvB criteria according to REACH, annex XIII.

This product does not contain a substance that has endocrine disrupting properties with respect to humans as no components meets the criteria. The aforementioned statement applies to substances contained in the product with a minimum content of 0.1%.

This product does not contain a substance that has endocrine disrupting properties with respect to non-target organisms as no components meets the criteria. The aforementioned statement applies to substances contained in the product with a minimum content of 0.1%.

Product does not contain listed SVHC substances &gt; 0,1 % according to Regulation (EC) No. 1907/2006 Article 59 (REACH)

**SECTION 3: Composition/information on ingredients****3.2. Mixtures****Chemical characterization**

Mixture of paraffinic hydrocarbons

**Relevant ingredients**

none (according to Regulation (EC) No 1907/2006 (REACH))

**SECTION 4: First aid measures****4.1. Description of first aid measures**

**Safety Data Sheet**

according to Regulation (EC) No 1907/2006

**TUDAMELT 45/47**

Revision date: 25.11.2022

Page 2 of 11

**General information**

Spillages make surfaces slippery.

**After inhalation**

In case of symptoms arising from inhalation of product fumes, mists or vapour: Remove casualty to a quiet and well ventilated place if safe to do so.

Obtain medical assistance if breathing remains difficult.

If casualty is unconscious and not breathing: Ensure that there is no obstruction to breathing and give artificial respiration by trained personnel. If necessary, give external cardiac massage and obtain medical advice.

If casualty is unconscious and breathing, place in the recovery position. Administer oxygen if necessary.

Inhalation is unlikely because of the low vapour pressure of the substance at ambient temperature.

Symptoms: none expected at ambient temperature. Inhalation of fumes or oil mists produced at high temperatures may cause irritation of the respiratory tract.

**After contact with skin**

Remove contaminated clothing, contaminated footwear and dispose of safely.

Seek medical attention if skin irritation, swelling or redness develops and persists.

Do not put ice on the burn. Remove non-sticking garments carefully. DO NOT attempt to remove portions of clothing glued to burnt skin but cut round them.

For minor thermal burns, cool the burn. Hold the burned area under cold running water for at least five minutes, or until the pain subsides. Body hypothermia must be avoided.

Seek medical attention in all cases of serious burns.

Wash affected area with soap and water.

May cause burn in case of contact with product at high temperature.

Symptoms: dry skin, irritation in case of repeated or prolonged exposure.

**After contact with eyes**

If hot product is splashed into the eye, it should be cooled down immediately to dissipate heat, under cold running water for at least 5 minutes. Immediately obtain specialist medical assessment and treatment for the casualty.

Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do so. Continue rinsing.

Symptoms: slight irritation. May cause burn in case of contact with product at high temperature.

**After ingestion**

Do not give anything by mouth to an unconscious person.

Do not induce vomiting. Ask for medical advice.

Symptoms: few or no symptoms expected. If any, nausea and diarrhoea might occur.

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

Individuals with pre-existing lung disorders may have increased susceptibility of the effects of exposure.

When using high-pressure equipment, injection of product can occur.

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

Monitor breathing and pulse rate. Treatment should be in general symptomatic to relieve any effects.

**SECTION 5: Firefighting measures****5.1. Extinguishing media****Suitable extinguishing media**

Foam (trained personnel only).

Water fog (trained personnel only).

Dry chemical powder.

Carbon dioxide (CO<sub>2</sub>).

Other inert gases (subject to regulations).

Sand or earth.

**Unsuitable extinguishing media**

Do not use direct water jets on the burning product; they could cause splattering and spread the fire.

Simultaneous use of foam and water on the same surface is to be avoided as water destroys the foam.

**Safety Data Sheet**

according to Regulation (EC) No 1907/2006

**TUDAMELT 45/47**

Revision date: 25.11.2022

Page 3 of 11

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

Incomplete combustion is likely to give rise to a complex mixture of airborne solid and liquid particulates, gases, including carbon monoxide, unidentified organic and inorganic compounds.

**5.3. Advice for firefighters**

Special protective equipment for firefighters

In case of a large fire or in confined or poorly ventilated spaces, wear full fire resistant protective clothing and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

**SECTION 6: Accidental release measures****6.1. Personal precautions, protective equipment and emergency procedures****General advice**

Keep away from sources of ignition - No smoking.  
Special danger of slipping by leaking/spilling product.  
When inside buildings or confined spaces, ensure adequate ventilation.  
Keep non-involved personnel away from the area of spillage. Alert emergency personnel.  
If required, notify relevant authorities according to all applicable regulations.

**For non-emergency personnel**

Work helmet. Antistatic non-skid safety shoes or boots.  
Small spillages: Normal antistatic working clothes are usually adequate. Large spillages: full body suit of chemically resistant and antistatic material.  
Work gloves providing adequate chemical resistance, specifically to aromatic hydrocarbons. Gloves made of PVA are not water-resistant, and are not suitable for emergency use.  
Goggles and /or face shield, if splashes or contact with eyes is possible or anticipated.  
If the situation cannot be completely assessed, or if an oxygen deficiency is possible, only SCBA's should be used.  
Respiratory protection: A half or full-face respirator with combined dust/organic vapour filter(s), or a Self-Contained Breathing Apparatus (SCBA) can be used according to the extent of spill and predictable amount of exposure.

**For emergency responders**

Wear personal protection equipment (refer to section 8).

**6.2. Environmental precautions**

Product in molten form: Prevent product from entering sewers, rivers or other bodies of water. Solidified product may clog drains and sewers.

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

Stop or contain leak at the source, if this possible without risk.

**For cleaning up**

In case of spillage in the water, the product will cool down rapidly and become solid.  
Collect solidified product with suitable means. (e.g. shovels).  
Collect free product with suitable means. Transfer collected product and other contaminated materials to suitable containers for recovery or safe disposal.  
Except in case of small spillages: The feasibility of any actions should always be assessed and advised, if possible, by a trained, competent person in charge of managing the emergency.  
If possible, large spillages in open waters should be contained with floating barriers or other mechanical means.  
If this not possible, control the spreading of the spillage, and collect the product by skimming or other suitable mechanical means.  
In case of soil contamination, remove contaminated soil and treat in accordance with local regulations.

**Other information**

Dust clouds may present an explosion hazard.  
Recommended measures are based on the most likely spillage scenarios for this material.

**Safety Data Sheet**

according to Regulation (EC) No 1907/2006

**TUDAMELT 45/47**

Revision date: 25.11.2022

Page 4 of 11

Local conditions (wind, air temperature, wave/current direction and speed) may significantly influence the choice of appropriate actions.

For this reason, local experts should be consulted when necessary. Local regulations may also prescribe or limit actions to be taken.

**6.4. Reference to other sections**

No information available.

**SECTION 7: Handling and storage****7.1. Precautions for safe handling****Advice on safe handling**

- Avoid contact with the hot product.
- Precautions should be taken to avoid skin burns when handling hot product.
- Avoid release to the environment.
- Avoid splash filling of bulk volumes when handling hot liquid product.
- Special danger of slipping by leaking/spilling product.
- Take precautionary measures against static electricity.
- Use adequate personal protective equipment as required.

**Advice on protection against fire and explosion**

- Keep away from sources of ignition - No smoking.

**Advice on general occupational hygiene**

- Wash hands and face before breaks and after work and take a shower if necessary.
- Apply skin care products after work.
- Do not put any product-impregnated cleaning rags into your trouser pockets.
- When using do not eat, drink, smoke, sniff.
- Keep away from food and beverages.

**7.2. Conditions for safe storage, including any incompatibilities****Requirements for storage rooms and vessels**

- If the product is supplied in containers: Keep only in the original container or in a suitable container for this kind of product.
- Storage area layout, tank design, equipment and operating procedures must comply with the relevant European, national or local legislation.
- Cleaning, inspection and maintenance of internal structure of storage tanks must be done only by properly equipped and qualified personnel as defined by national, local or company regulations.
- Some synthetic materials may be unsuitable for containers or container linings depending on the material specification and intended use. Compatibility should be checked with the manufacturer.
- Protect drains from spills and prevent entry of molten material, since this may result in blockage on cooling.
- Liquids: Recommended materials for containers, or container linings use mild steel, stainless steel.
- Recommended materials: pressboard boxes.
- Keep containers tightly closed and properly labelled.

**Hints on joint storage**

- Store separately from oxidising agents.

**Further information on storage conditions**

- Empty containers may contain combustible product residues. Do not weld, solder, drill, cut or incinerate empty containers, unless they have been properly cleaned.

Fire class: B

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

- Ensure that proper housekeeping measures are in place.

**SECTION 8: Exposure controls/personal protection****8.1. Control parameters**



## Safety Data Sheet

according to Regulation (EC) No 1907/2006

### TUDAMELT 45/47

Revision date: 25.11.2022

Page 5 of 11

#### Additional advice on limit values

Recommendation; occupational exposure limit value: 2 mg/m<sup>3</sup> (Limit value type (country of origin): TLV (USA))

Monitoring procedures should be chosen according to the indications set by national authorities or labour contracts.

In absence of such indications, direct exposure to fumes/dust can be assessed through active air sampling of personal breathing zone (e.g. NIOSH method 5042, UK HSE MDHS 14/3).

Any comparison should be made only between data obtained with the same procedure.

#### 8.2. Exposure controls



##### Appropriate engineering controls

Material handled at elevated temperature may cause thermal burns by contact with molten product.

Waxes may give off irritant/flammable vapours if heated close to their boiling points.

Although these are unlikely to present a significant health hazard, to avoid respiratory tract irritation inhalation exposure should be kept to a minimum by observing good work practice and ensuring good ventilation around work areas.

Storage and handling temperatures should be kept as low as feasible to minimize fume production.

Minimise exposure to fumes. Where hot product is handled in confined spaces, effective local ventilation must be provided.

Do not enter empty storage tanks until measurements of available oxygen have been carried out.

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

###### Eye/face protection

Hot/molten product: If splashing is likely, full head and face protection (protective shield and/or safety goggles) should be used. Product at ambient temperature (dust): safety goggles.

###### Hand protection

When handling with chemical substances, protective gloves must be worn with the CE-label including the four control digits. The quality of the protective gloves resistant to chemicals must be chosen as a function of the specific working place concentration and quantity of hazardous substances. For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves.

Suitable material: NBR (Nitrile rubber), CR (polychloroprene, chloroprene rubber), FKM (fluoro rubber) Index No.: 5-6, Category 2 (EN 388)

Hot/molten product: Heat resistant gloves with long cuffs, or gauntlets. Product at ambient temperature (dust): Wear suitable gloves tested to EN374.

Gloves must be periodically inspected and changed in case of wear, perforations or contaminations.

###### Skin protection

Hot/molten product: Wear protective clothing for operations with hot material: heat resistant coveralls (with trousers legs over boots and sleeves over cuffs of gloves), heat resistant heavy duty antiskid boots (e. g. leather).

Product at ambient temperature (dust): Long-sleeved coveralls, work boots. Coveralls should be changed at the end of the work shift and cleaned as necessary to avoid transfer of product to clothes or underwear.

For loading/unloading operations: wear safety helmet, if necessary integrated full face visor. In case of hot/molten product: with integrated full face visor.

###### Respiratory protection

aerosol or mist formation: Filtering device (full mask or mouthpiece) with filter: A2, A2/P2, ABEK

If necessary, approved respiratory protection equipment shall be used when handling hot product in confined spaces: enclosed face mask with cartridge/filter type "A" or self-contained breathing apparatus (SCBA).

**Safety Data Sheet**

according to Regulation (EC) No 1907/2006

**TUDAMELT 45/47**

Revision date: 25.11.2022

Page 6 of 11

Approved respiratory protection equipment shall be used when handling product in confined spaces: full-face mask with particulate filter(s) giving a sufficient protection factor for the dust level present.

If exposure levels cannot be determined or estimated with adequate confidence, or an oxygen deficiency is possible, only SCBA's should be used.

**Thermal hazards**

Wear protective clothing for operations with hot material: heat resistant coveralls (with trousers legs over boots and sleeves over cuffs of gloves), heat resistant heavy duty antiskid boots (e. g. leather).

**SECTION 9: Physical and chemical properties****9.1. Information on basic physical and chemical properties**

|                                                           |                           |                    |
|-----------------------------------------------------------|---------------------------|--------------------|
| Physical state:                                           | solid                     |                    |
| Colour:                                                   | white                     |                    |
| Odour:                                                    | odourless                 |                    |
|                                                           |                           | <b>Test method</b> |
| Melting point/freezing point:                             | No information available. |                    |
| Boiling point or initial boiling point and boiling range: | No information available. |                    |
| Flammability:                                             | not applicable            |                    |
| Lower explosion limits:                                   | No information available. |                    |
| Upper explosion limits:                                   | No information available. |                    |
| Flash point:                                              | > 100 °C                  | DIN/ISO 2592       |
| Auto-ignition temperature:                                | No information available. |                    |
| Decomposition temperature:                                | not determined            |                    |
| pH-Value:                                                 | not determined            |                    |
| Viscosity / kinematic:<br>(at 100 °C)                     | 2,7 mm²/s                 | DIN EN ISO 3104    |
| Water solubility:                                         | practically insoluble     |                    |
| Solubility in other solvents                              |                           |                    |
| not determined                                            |                           |                    |
| Partition coefficient n-octanol/water:                    | 2 - 6                     |                    |
| Vapour pressure:                                          | not determined            |                    |
| Density (at 80 °C):                                       | 0,760 g/cm³               | DIN 51757          |
| Bulk density:                                             | not determined            |                    |
| Relative vapour density:                                  | No information available. |                    |
| Particle characteristics:                                 | not applicable            |                    |

**9.2. Other information****Information with regard to physical hazard classes****Explosive properties**

The product is not: Explosive.

**Self-ignition temperature**

Solid:

No information available.

Gas:

No information available.

**Oxidizing properties**

No information available.

**Other safety characteristics**

Evaporation rate:

No information available.

Solvent separation test:

No information available.

Solvent content:

No information available.

Solid content:

No information available.

Sublimation point:

No information available.

Softening point:

No information available.

Pour point:

No information available.

**Safety Data Sheet**

according to Regulation (EC) No 1907/2006

**TUDAMELT 45/47**

Revision date: 25.11.2022

Page 7 of 11

Solidifying point:: > 45 °C DIN ISO 2207  
Viscosity / dynamic: No information available.  
Flow time: No information available.

**Further Information**

No information available.

**SECTION 10: Stability and reactivity****10.1. Reactivity**

No information available.

**10.2. Chemical stability**

No information available.

**10.3. Possibility of hazardous reactions**

No information available.

**10.4. Conditions to avoid**

Excessive heating above the maximum recommended handling and storage temperature may cause degradation of the substance and evolution of irritant vapours and fumes.

**10.5. Incompatible materials**

Materials to avoid:

Contact with strong oxidizers (peroxides, chromates, etc.) may cause a fire hazard.

A mixture with nitrates or other strong oxidisers (e.g. chlorates, perchlorates, liquid oxygen) may create an explosive mass. Sensitivity to heat, friction or shock cannot be assessed in advance.

**10.6. Hazardous decomposition products**

Combustion (incomplete) will likely generate oxides of carbon, sulphur and nitrogen, as well as additional undetermined organic compounds of the same elements. None under normal conditions at ambient temperatures.

**Further information**

This substance is stable under all ordinary circumstances at ambient temperatures, and if released into the environment.

**SECTION 11: Toxicological information****11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008****Acute toxicity**

Based on available data, the classification criteria are not met.

**ATEmix calculated**

ATE (oral) > 2000 mg/kg; ATE (dermal) > 2000 mg/kg; ATE (inhalation vapour) > 20 mg/l; ATE (inhalation dust/mist) > 5 mg/l

**Irritation and corrosivity**

Skin corrosion/irritation: Based on available data, the classification criteria are not met.

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

**Sensitising effects**

Based on available data, the classification criteria are not met.

**Carcinogenic/mutagenic/toxic effects for reproduction**

Germ cell mutagenicity: Based on available data, the classification criteria are not met.

Carcinogenicity: Based on available data, the classification criteria are not met.

Reproductive toxicity: Based on available data, the classification criteria are not met.

CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction): none

**STOT-single exposure**

Based on available data, the classification criteria are not met.

**Safety Data Sheet**

according to Regulation (EC) No 1907/2006

**TUDAMELT 45/47**

Revision date: 25.11.2022

Page 8 of 11

**STOT-repeated exposure**

Based on available data, the classification criteria are not met.

**Aspiration hazard**

Based on available data, the classification criteria are not met.

**Information on likely routes of exposure**

Ingestion / Inhalation / Skin contact / Eye contact

**Additional information on tests**

The substance is classified as not hazardous according to regulation (EC) No 1272/2008 [CLP].

**11.2. Information on other hazards****Endocrine disrupting properties**

Based on available data, the classification criteria are not met.

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

The product is not: Ecotoxic.

**12.2. Persistence and degradability**

The product has not been tested.

**12.3. Bioaccumulative potential**

The product has not been tested.

**12.4. Mobility in soil**

The product has not been tested.

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

The substances in the mixture do not meet the PBT/vPvB criteria according to REACH, annex XIII.

This substance does not meet the PBT/vPvB criteria of REACH, Annex XIII.

**12.6. Endocrine disrupting properties**

This product does not contain a substance that has endocrine disrupting properties with respect to non-target organisms as no components meets the criteria.

The aforementioned statement applies to substances contained in the product with a minimum content of 0.1%.

**12.7. Other adverse effects**

No information available.

**Further information**

Do not allow uncontrolled discharge of product into the environment.

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

Surplus (unused) or off-spec substance can be recovered or re-conditioned (according to specific characteristics and composition), or can be disposed of as waste.

Where possible (e.g. in the absence of relevant contamination), recycling of used substance is feasible and recommended.

Contaminated or waste substance (not directly recyclable): Disposal can be carried out directly, or by delivery to qualified waste handlers.

National legislation may identify a specific organization, and/or prescribe composition limits and methods for recovery or disposal.

This substance can be burned or incinerated, subject to national/local authorizations, relevant contamination limits, safety regulations and air quality legislation.

These codes can be given only as a suggestion, according to the original composition of the product, and its intended (foreseeable) use(s).

The final user has the responsibility for the attribution of the most suitable code, according to the actual use(s)

**Safety Data Sheet**

according to Regulation (EC) No 1907/2006

**TUDAMELT 45/47**

Revision date: 25.11.2022

Page 9 of 11

of the material, contaminations or alterations.

Other national or local legislation may require additional identification or other measures for this product, may also limit or exclude the use of generic (n.o.s.) codes.

**List of Wastes Code - contaminated packaging**

150106 WASTE PACKAGING; ABSORBENTS, WIPING CLOTHS, FILTER MATERIALS AND PROTECTIVE CLOTHING NOT OTHERWISE SPECIFIED; packaging (including separately collected municipal packaging waste); mixed packaging

**Contaminated packaging**

Disposal of emptied containers: Contact the original supplier or deliver to a qualified disposal organization. Do not cut, weld, bore, burn or incinerate emptied containers, unless they have been cleaned and declared safe. Empty containers may contain combustible product residues. Do not re-use emptied, unclean containers for other purposes.

General information:

In the absence of relevant alterations to the material or presence of contaminants, disposal of this substance as surplus (unused) or off-spec material, or waste resulting from the foreseeable use(s), does not present a specific hazard, or require special handling measures other than those indicated in Sect 7.

**SECTION 14: Transport information****Land transport (ADR/RID)**

**14.1. UN number or ID number:** UN 3257  
**14.2. UN proper shipping name:** Elevated temperature liquid, n.o.s. (Paraffin)  
**14.3. Transport hazard class(es):** 9  
**14.4. Packing group:** III  
Hazard label: 9



Classification code: M9  
Special Provisions: 274 580 643  
Limited quantity: 0  
Excepted quantity: E0  
Transport category: 3  
Hazard No: 99  
Tunnel restriction code: D

**Other applicable information (land transport)**

Only applies for temperatures higher than 100°C.

**Inland waterways transport (ADN)**

**14.1. UN number or ID number:** UN 3257  
**14.2. UN proper shipping name:** ELEVATED TEMPERATURE LIQUID, N.O.S., at or above 100 °C and below its flash point (including molten metals, molten salts, etc.) (Paraffin)  
**14.3. Transport hazard class(es):** 9  
**14.4. Packing group:** III  
Hazard label: 9



Classification code: M9  
Special Provisions: 274 580 643  
Limited quantity: 0  
Excepted quantity: E0

**Safety Data Sheet**

according to Regulation (EC) No 1907/2006

**TUDAMELT 45/47**

Revision date: 25.11.2022

Page 10 of 11

**Other applicable information (inland waterways transport)**

Only applies for temperatures higher than 100°C.

**Marine transport (IMDG)**

**14.1. UN number or ID number:** UN 3257  
**14.2. UN proper shipping name:** Elevated temperature liquid, n.o.s. (Paraffin)  
**14.3. Transport hazard class(es):** 9  
**14.4. Packing group:** III  
Hazard label: 9



Special Provisions: 232, 274  
Limited quantity: 0  
Excepted quantity: E0  
EmS: F-A, S-P

**Other applicable information (marine transport)**

Only applies for temperatures higher than 100°C.

**Air transport (ICAO-TI/IATA-DGR)**

**14.1. UN number or ID number:** UN 3257  
**14.2. UN proper shipping name:** Elevated temperature liquid, n.o.s. (Paraffin)  
**14.3. Transport hazard class(es):** 9  
**14.4. Packing group:** -  
Hazard label: 9



Limited quantity Passenger: Forbidden  
Passenger LQ: Forbidden  
Excepted quantity: E0  
IATA-packing instructions - Passenger: Forbidden  
IATA-max. quantity - Passenger: Forbidden  
IATA-packing instructions - Cargo: Forbidden  
IATA-max. quantity - Cargo: Forbidden

**Other applicable information (air transport)**

Only applies for temperatures higher than 100°C.

**14.5. Environmental hazards**

ENVIRONMENTALLY HAZARDOUS: No

**14.6. Special precautions for user**

No information available.

**14.7. Maritime transport in bulk according to IMO instruments**

not applicable

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

Information according to Directive 2012/18/EU (SEVESO III): Not subject to 2012/18/EU (SEVESO III)

**National regulatory information**

Water hazard class (D): 1 - slightly hazardous to water

**Additional information**

**Safety Data Sheet**

according to Regulation (EC) No 1907/2006

**TUDAMELT 45/47**

Revision date: 25.11.2022

Page 11 of 11

none

15.2 Chemical Safety Assessment  
not applicable.

**SECTION 16: Other information****Changes**

This data sheet contains changes from the previous version in section(s): 2,4,6,7,8,9,11,12,14.

**Abbreviations and acronyms**

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

(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 Harmonized 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

LC50: Lethal concentration, 50%

LD50: Lethal dose, 50%

**Further Information**

The above information describes exclusively the safety requirements of the product and is based on our present-day knowledge. The information is intended to give you advice about the safe handling of the product named in this safety data sheet, for storage, processing, transport and disposal. The information cannot be transferred to other products. In the case of mixing the product with other products or in the case of processing, the information on this safety data sheet is not necessarily valid for the new made-up material.

*(The data for the relevant ingredients were taken respectively from the last version of the sub-contractor's safety data sheet.)*