# MARLICAN

**Version: *6*.14** **Revision Date 2017/06/28**

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

### 1.1 Product identifier

| | |
|---|---|
| **Trade name** | **MARLICAN** |
| **REACH No.** | 01-2119489372-31-0002 |
| **Substance name (REACH / CLP)** | Benzene, C10-13-alkyl derivs. |

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

| | |
|---|---|
| **Use** | Industrial use<br>raw material for synthesis processes in the chemical industry |
| **Uses advised against** | |

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

| | |
|---|---|
| **Company** | SASOL Germany GmbH<br>Anckelmannsplatz 1<br>20537 Hamburg<br><br>Telephone: +49 40 63684-1000<br>Telefax: +49 40 63684-3700 |
| **Information (Product safety):** | Telephone: + 49 (0) 23 65 - 49 47 05<br>Telefax: + 49 (0) 23 65 - 49 92 40 |
| **E-mail address** | msds-info.germany@de.sasol.com |

### 1.4 Emergency telephone number

| | |
|---|---|
| **Emergency telephone number** | + 49 (0) 23 65 - 49 22 32 |

## SECTION 2: HAZARDS IDENTIFICATION

### 2.1 Classification of the substance or mixture

**Classification (REGULATION (EC) No 1272/2008)**

| | |
|---|---|
| Aspiration hazard Category 1 | May be fatal if swallowed and enters airways. |

### 2.2 Label elements

**Labelling (REGULATION (EC) No 1272/2008)**

**Hazard pictograms**

**Signal word** Danger

**Hazard statements**

| | |
|---|---|
| H304 | May be fatal if swallowed and enters airways. |

**Precautionary statements**

| | |
|---|---|
| P301 + P310 | IF SWALLOWED: Immediately call a POISON CENTER/doctor. |
| P331 | Do NOT induce vomiting. |
| P405 | Store locked up. |
| P501 | Dispose of contents/ container to an approved waste disposal plant. |

### 2.3 Other hazards

None known.

## SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

This product is a substance in the meaning of regulation (EC) 1907/2006.

**COMPONENTS TO BE NAMED IN ACCORDANCE WITH REGULATION (EC) 1907/2006 AS WELL AS OTHER HAZARDOUS INGREDIENTS AND CONTAINED SUBSTANCES WITH WORK PLACE LIMIT VALUES**

**Benzene, C10-13-alkyl derivs.**

**component type:** Active ingredient

**EC-No.:** 267-051-0 **Index-No.:** **CAS-No.:** 67774-74-7
**REACH No.**: 01-2119489372-31-0002
**Substance name (REACH / CLP):** Benzene, C10-13-alkyl derivs.
**Classification (Regulation (EC) No 1272/2008):** Asp. Tox. 1 H304

For the full text of the H-Statements mentioned in this Section, see Section 16.

## SECTION 4: FIRST AID MEASURES

### 4.1 Description of first aid measures

| | |
|---|---|
| **General advice** | In the case of accident or if you feel unwell, seek medical advice immediately (show the label where possible). |
| **If inhaled** | In the case of inhalation of aerosol/mist consult a physician if necessary. Consult a physician after significant exposure. |
| **In case of skin contact** | Take off all contaminated clothing immediately. Wash off immediately with soap and plenty of water. If skin irritation persists, call a physician. |
| **In case of eye contact** | Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician. If eye irritation persists, consult a specialist. |
| **If swallowed** | Do NOT induce vomiting. Keep respiratory tract clear. Call a physician immediately. |

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

| | |
|---|---|
| **Most important symptoms and effects, both acute and delayed** | Symptoms: No information available.<br>Risks: Risk of product entering the lungs on vomiting after ingestion. |

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

| | |
|---|---|
| **Indication of any immediate medical attention and special treatment needed** | Treatment: No information available. |

## SECTION 5: FIREFIGHTING MEASURES

**5.1 Extinguishing media**

| | |
|---|---|
| **Suitable extinguishing media** | Water mist, Carbon dioxide (CO2), Foam, Dry chemical, Keep containers and surroundings cool with water spray. |

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

| | |
|---|---|
| **Specific hazards during firefighting** | In case of fire hazardous decomposition products may be produced such as:<br>Carbon dioxide (CO2)<br>Carbon monoxide |

**5.3 Advice for firefighters**

| | |
|---|---|
| **Special protective equipment for firefighters** | Wear self-contained breathing apparatus and protective suit. |
| **Further information** | Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. |

## SECTION 6: ACCIDENTAL RELEASE MEASURES

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

| | |
|---|---|
| **Personal precautions** | Use personal protective equipment. |

**6.2 Environmental precautions**

| | |
|---|---|
| **Environmental precautions** | If the product contaminates rivers and lakes or drains inform respective authorities.Avoid subsoil penetration.Do not flush into surface water or sanitary sewer system. |

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

| | |
|---|---|
| **Methods for cleaning up** | Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see section 13). After cleaning, flush away traces with water. |

**6.4 Reference to other sections**

For personal protection see section 8.

## SECTION 7: HANDLING AND STORAGE

**7.1 Precautions for safe handling**

| | |
|---|---|
| **Advice on safe handling** | Avoid inhalation, ingestion and contact with skin and eyes.<br>Do not breathe vapours or spray mist.<br>Smoking, eating and drinking should be prohibited in the application area. |

| | |
|---|---|
| **Advice on protection against fire and explosion** | Normal measures for preventive fire protection.<br>Keep away from combustible material.<br>Take precautionary measures against static discharges.<br>No smoking. |

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

| | |
|---|---|
| **Requirements for storage areas and containers** | No special storage conditions required. Keep in a well-ventilated place. |
| **Storage class (TRGS 510)** | 10: Combustible liquids not in Storage Class 3 |
| **container material** | suitable materials: Stainless steel: 1.4541, 1.4571 (DIN); X6CrNiTi18-10, X6CrNiMoTi17-12-2 (EN); 321, 316 Ti (AISI) |

**7.3 Specific end use(s)**

| | |
|---|---|
| **Specific use(s)** | This information is not available. |

## SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

**8.1 Control parameters**

**COMPONENTS WITH WORKPLACE CONTROL PARAMETERS**

**National occupational exposure limits**

No data available

**EUROPEAN OCCUPATIONAL EXPOSURE LIMITS**

No data available

**DERIVED NO EFFECT LEVEL (DNEL)**

| **Substance name: Benzene, C10-13-alkyl derivs.** | | | |
|---|---|---|---|
| **End Use** | **Exposure routes** | **Value** | **Note** |
| Workers | dermal, Acute/short-term exposure - systemic effects | | Not relevant / not applicable |
| | Inhalation, Acute/short-term exposure - systemic effects | | Not relevant / not applicable |
| | dermal, Acute/short-term exposure - local effects | | Not relevant / not applicable |
| | Inhalation, Acute/short-term exposure - local effects | | Not relevant / not applicable |
| | dermal, long-term exposure - systemic effects | 9.6 mg/kg | based on body weight and day |
| | Inhalation, long-term exposure - systemic effects | 7 mg/m3 | |
| | dermal, long-term exposure - local effects | | Not relevant / not applicable |
| | Inhalation, long-term exposure - local effects | 7 mg/m3 | |
| Consumers | dermal, Acute/short-term exposure - systemic effects | | Not relevant / not applicable |
| | Inhalation, Acute/short-term exposure - systemic effects | | Not relevant / not applicable |

| | | | |
|---|---|---|---|
| | Oral, Acute/short-term exposure - systemic effects | | Not relevant / not applicable |
| | dermal, Acute/short-term exposure - local effects | | Not relevant / not applicable |
| | Inhalation, Acute/short-term exposure - local effects | | Not relevant / not applicable |
| | dermal, long-term exposure - systemic effects | 4.8 mg/kg | based on body weight and day |
| | Inhalation, long-term exposure - systemic effects | 1.8 mg/m3 | |
| | Oral, long-term exposure - systemic effects | 0.5 mg/kg | based on body weight and day |
| | dermal, long-term exposure - local effects | | Not relevant / not applicable |
| | Inhalation, long-term exposure - local effects | 1.8 mg/m3 | |

**PREDICTED NO EFFECT CONCENTRATION (PNEC)**

| **Substance name: Benzene, C10-13-alkyl derivs.** | | |
|---|---|---|
| **Environmental Compartment** | **Value** | **Note** |
| Fresh water | 0.00075 mg/l | |
| Marine water | 0.000075 mg/l | |
| intermittent release | 0.0001 mg/l | |
| treatment plant | 14.2 mg/l | |
| Fresh water sediment | 1.65 mg/kg | based on dry weight |
| Marine sediment | 0.165 mg/kg | based on dry weight |
| Soil | 0.329 mg/kg | based on dry weight |
| food | | Not relevant / not applicable |

**8.2 Exposure controls**

**PERSONAL PROTECTIVE EQUIPMENT**

**Respiratory protection**

No personal respiratory protective equipment normally required. In inadequately ventilated areas, where workplace limits are exceeded, where unpleasant odours exist or where aerosols are in use, or smoke and mist occur, use self-contained breathing apparatus or breathing apparatus with a type A filter or appropriate combined filter (e.g. where aerosols are in use, or smoke and mist occur, A-P2 or ABEK-P2), in compliance with EN 141.

**Hand protection**

The choice of an appropriate glove does not only depend on its material but also on other quality features and is different from one producer to the other., Please observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves. Also take into consideration the specific local conditions under which the product is used, such as the danger of cuts, abrasion, and the contact time., Be aware that in daily use the durability of a chemical resistant protective glove can be notably shorter than the break through time measured according to EN 374, due to the numerous outside influences (e.g. temperature).

**gloves suitable for permanent contact:**
Material: Fluorinated rubber
Break through time: >= 480 min

Layer thickness: 0.4 mm

**gloves suitable for splash protection:**
Material: Nitrile rubber/nitrile latex
Break through time: >= 240 min
Layer thickness: 0.35 mm

**unsuitable gloves**
Material: Natural rubber/natural latex, Polychloroprene, butyl-rubber, Polyvinylchloride

| | |
|---|---|
| **Eye protection** | Safety glasses |
| **Skin and body protection** | Protective suit |
| **Hygiene measures** | General industrial hygiene practice. |

**ENVIRONMENTAL EXPOSURE CONTROLS**

| | |
|---|---|
| **General advice** | If the product contaminates rivers and lakes or drains inform respective authorities. |
| **Soil** | Avoid subsoil penetration. |
| **Water** | Do not flush into surface water or sanitary sewer system. |

## SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

**9.1 Information on basic physical and chemical properties**

| | |
|---|---|
| **Physical state** | liquid; 20 °C; 1,013 hPa |
| **Form** | liquid |
| **Colour** | colourless |
| **Odour** | No information available. |
| **Odour Threshold** | No data available |
| **pH** | Not applicable |
| **Pour point** | < -70 °C; ISO 3016 |
| **Boiling point/boiling range** | 275 - 312 °C; 1,013 hPa; ASTM D 1078 |
| **Flash point** | ca. 120 °C; DIN 51758 |
| **Evaporation rate** | No data available |
| **Flammability (solid, gas)** | not applicable (liquid) |
| **Lower explosion limit** | 0.45 %(V) |
| **Upper explosion limit** | 10.7 %(V) |
| **Vapour pressure** | < 0.1 hPa; 20 °C |
| **Relative vapour density** | No data available |
| **Density** | 0.86 g/cm3; 20 °C; DIN 51757 |
| **Relative density** | No data available |
| **Water solubility** | < 0.01 g/l; 20 °C |

| | |
|---|---|
| **Partition coefficient: n-octanol/water** | log Pow: > 5.0 |
| **Ignition temperature** | ca. 220 °C; DIN 51794 |
| | ca. 341 °C; ASTM E 659 |
| **Viscosity, dynamic** | 7 mPas; 20 °C |
| **Explosive properties** | Constituents do not contain chemical groups associated with explosivity. |
| **Oxidizing properties** | not expected based on structure and functional groups |

**9.2 Other data**

None known.

## SECTION 10: STABILITY AND REACTIVITY

**10.1 Reactivity**

| | |
|---|---|
| **Note** | No decomposition if stored and applied as directed. |

**10.2 Chemical stability**

| | |
|---|---|
| **Note** | Stable under normal conditions. |

**10.3 Possibility of hazardous reactions**

| | |
|---|---|
| **Hazardous reactions** | None known. |

**10.4 Conditions to avoid**

| | |
|---|---|
| **Conditions to avoid** | Heat, flames and sparks. |

**10.5 Incompatible materials to avoid**

| | |
|---|---|
| **Materials to avoid** | Strong oxidizing agents; |

**10.6 Hazardous decomposition products**

| | |
|---|---|
| **Hazardous decomposition products** | No decomposition if stored normally. |
| **Thermal decomposition** | No decomposition if used as directed. |

## SECTION 11: TOXICOLOGICAL INFORMATION

**11.1 Information on toxicological effects**

**Acute toxicity**

| | |
|---|---|
| **Acute oral toxicity** | LD50 Rat: > 2,000 mg/kg; Directive 67/548/EEC, Annex V, B.1.<br>Symptoms: Piloerection, Gastrointestinal disturbance<br>Based on available data, the classification criteria are not met. |
| **Acute inhalation toxicity** | No data available<br>Negligible or unlikely exposure pathways |
| **Acute dermal toxicity** | LD50 Rat: > 2,000 mg/kg; OECD Test Guideline 402<br>Symptoms: Erythema, Crusting<br>(literature value) |

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

**Skin corrosion/irritation**

**Skin irritation** Rabbit: moderately irritating; Directive 84/449/EEC, B.4.
Based on available data, the classification criteria are not met.

**Serious eye damage/eye irritation**

**Eye irritation** Rabbit: not irritating; Directive 84/449/EEC, B.5.
Based on available data, the classification criteria are not met.

**Respiratory or skin sensitisation**

**Sensitisation** Maximisation Test Guinea pig: not sensitizing; OECD Test Guideline 406
Based on available data, the classification criteria are not met.

**Germ cell mutagenicity**

**Genotoxicity in vitro** In vitro tests did not show mutagenic effects
(literature value)

**Genotoxicity in vivo** In vivo tests did not show mutagenic effects
(literature value)

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

**Carcinogenicity**

**Carcinogenicity** The substance has been shown to be not genotoxic, therefore it is not expected to have a carcinogenic potential.

**Reproductive toxicity**

**Reproductive toxicity** Two-generation reproductive toxicity: Rat; Oral
NOAEL ((parents)): 50 mg/kg (based on body weight and day)
NOAEL (F1): 50 mg/kg (based on body weight and day)
NOAEL (F2): 50 mg/kg (based on body weight and day); OECD Test Guideline 416
(literature value)
Based on available data, the classification criteria are not met.

**Teratogenicity** Rat; Oral
NOAEL: 125 mg/kg (based on body weight and day)
NOAEL (pregnant female): 125 mg/kg (based on body weight and day); OECD Test Guideline 414
based on body weight and day
(literature value)
Based on available data, the classification criteria are not met.

**STOT - single exposure**

**Remarks** The substance or mixture is not classified as specific target organ toxicant, single exposure.

**STOT - repeated exposure**

**Remarks** The substance or mixture is not classified as specific target organ toxicant, repeated exposure.

**Repeated dose toxicity** Rat; Oral; 28-day
LOAEL: 125 mg/kg (based on body weight and day); OECD Test Guideline 407
Symptoms: reduced food consumption, reduced body weight gain
based on body weight and day
(literature value)

Rat; Oral; Subchronic toxicity127 d
NOAEL: 50 mg/kg (based on body weight and day)
LOAEL: 500 mg/kg (based on body weight and day); OECD Test Guideline 416
Symptoms: reduced body weight gain

based on body weight and day
(literature value)

**Aspiration hazard**

**Aspiration toxicity** May be fatal if swallowed and enters airways.

**Further information**

**Toxicological information** Toxicokinetics
The substance is rapidly eliminated from the body.
extensive and rapid metabolisation
(literature value)

## SECTION 12: ECOLOGICAL INFORMATION

**12.1 Toxicity**

| | |
|---|---|
| **Toxicity to fish** | (14 d) Danio rerio (zebra fish) ; semi-static test; OECD Test Guideline 204<br>In the range of water solubility not toxic under test conditions. |
| **Toxicity to fish - Chronic toxicity** | (21 d) Brachydanio rerio (zebrafish); flow-through test<br>In the range of water solubility not toxic under test conditions. |
| **Toxicity to daphnia and other aquatic invertebrates** | (48 h) Daphnia magna (Water flea) ; Directive 67/548/EEC, Annex V, C.2.<br>In the range of water solubility not toxic under test conditions.<br>(literature value) |
| **Toxicity to daphnia and other aquatic invertebrates - Chronic toxicity** | (21 d) Daphnia magna (Water flea); reproduction rate; semi-static test; OECD Test Guideline 211; In the range of water solubility not toxic under test conditions. |
| **Toxicity to aquatic plants** | (72 h) Desmodesmus subspicatus (Scenedesmus subspicatus) ; OECD Test Guideline 201; In the range of water solubility not toxic under test conditions.<br>(literature value) |
| **Toxicity to bacteria** | The substance is not to be considered to be inhibitory to bacteria. |
| **Toxicity to soil dwelling organisms** | No data available |
| **Toxicity to terrestrial flora** | No data available |
| **Toxicity for other terrestrial non-mammalian fauna** | No data available |

**12.2 Persistence and degradability**

| | |
|---|---|
| **Biodegradability** | Readily biodegradable.; > 60 %; 28 d; aerobic<br>Category approach |

**12.3 Bioaccumulative potential**

| | |
|---|---|
| **Bioaccumulation** | Lepomis macrochirus (Bluegill sunfish); 96 h; 0.092 mg/l; Bioconcentration factor (BCF): 35<br>Does not significantly accumulate in organisms.<br>(literature value) |

**12.4 Mobility in soil**

| | |
|---|---|
| **Mobility** | Adsorption/Soil; Koc: 22000; log Koc: 4.34<br>immobile<br>(literature value) |

**12.5 Results of PBT and vPvB assessment**

**Results of PBT assessment** Based on available data, the classification criteria are not met.

**12.6 Other adverse effects**

**General advice** None known.

## SECTION 13: DISPOSAL CONSIDERATIONS

**13.1 Waste treatment methods**

**Product** Can be incinerated, when in compliance with local regulations.

## SECTION 14: TRANSPORT INFORMATION

**14.1 UN number**

| | |
|---|---|
| **ADR** | Not dangerous goods |
| **RID** | Not dangerous goods |
| **ADN** | Not dangerous goods |
| **IMDG** | Not dangerous goods |
| **ICAO/IATA** | Not dangerous goods |

**14.2 Proper shipping name**

| | |
|---|---|
| **ADR** | Not dangerous goods |
| **RID** | Not dangerous goods |
| **ADN** | Not dangerous goods |
| **IMDG** | Not dangerous goods |
| **ICAO/IATA** | Not dangerous goods |

**14.3 Transport hazard class**

| | |
|---|---|
| **ADR** | Not dangerous goods |
| **RID** | Not dangerous goods |
| **ADN** | Not dangerous goods |
| **IMDG** | Not dangerous goods |
| **ICAO/IATA** | Not dangerous goods |

**14.4 Packing group**

| | |
|---|---|
| **ADR** | Not dangerous goods |
| **RID** | Not dangerous goods |
| **ADN** | Not dangerous goods |
| **IMDG** | Not dangerous goods |
| **ICAO/IATA** | Not dangerous goods |

**14.5 Environmental hazards**

| | | |
|---|---|---|
| **ADR** | Environmentally hazardous | no |
| **RID** | Environmentally hazardous | no |

| | | |
|---|---|---|
| **ADN** | Environmentally hazardous | no |
| **IMDG** | Marine pollutant | no |
| **ICAO/IATA** | Environmentally hazardous | no |

**14.6 Special precautions for user**

Not classified as dangerous in the meaning of transport regulations.

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

| | |
|---|---|
| Ship type | 3 |
| Pollution category | Y |
| Remarks | MARPOL NAME: Alkyl (C9+) benzenes |

## SECTION 15: REGULATORY INFORMATION

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

**Occupational restrictions** Employment restrictions for children and young workers in accordance with Directive 94/33/EC and the respective national provisions are to be observed.

**NATIONAL/OTHER REGULATIONS**

**Legislation on the control of major-accident hazards involving dangerous substances** Seveso III: Directive 2012/18/EU of the European Parliament and of the Council on the control of major-accident hazards involving dangerous substances.

list entry in the directive:: Not applicable

**NOTIFICATION STATUS**

| | | |
|---|---|---|
| US. Toxic Substances Control Act | TSCA | listed (product or constituents are listed) |
| Canada. Canadian Environmental Protection Act (CEPA). Domestic Substances List (DSL) | DSL | listed (product or constituents are listed) |
| Australia. Industrial Chemical (Notification and Assessment) Act | AICS | listed (product or constituents are listed) |
| New Zealand. Inventory of Chemicals (NZIoC), as published by ERMA New Zealand | NZIOC | listed (product or constituents are listed) |
| Japan. Kashin-Hou Law List | ENCS (JP) | listed (product or constituents are listed) |
| Japan. Industrial Safety & Health Law (ISHL) List | ISHL (JP) | listed (product or constituents are listed) |
| Korea. Existing Chemicals Inventory (KECI) | KECI (KR) | listed (product or constituents are listed) |
| Philippines. The Toxic Substances and Hazardous and Nuclear Waste Control Act | PICCS (PH) | listed (product or constituents are listed) |
| China. Inventory of Existing Chemical Substances | INV (CN) | listed (product or constituents are listed) |
| Switzerland. Consolidated Inventory | CH INV | listed (product or constituents are listed) |

Please note: the names and CAS numbers which are used for this product in the stated inventories may deviate from the information which is listed in chapter 3.

**15.2 Chemical safety assessment**

**Benzene, C10-13-alkyl derivs.**

A Chemical Safety Assessment has been carried out for this substance.

## SECTION 16: OTHER INFORMATION

**Full text of H-Statements referred to under sections 2 and 3.**

| | |
|---|---|
| H304 | May be fatal if swallowed and enters airways. |

**Safety datasheet sections which have been updated:**

14. Transport information
Annex

**Further information:** The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any

other materials or in any process, unless specified in the text.
This safety datasheet only contains information relating to safety and does not replace any product information or product specification.

**Key or legend to abbreviations and acronyms used in the safety data sheet**

| | |
|---|---|
| ADN | Accord européen relatif au transport international des marchandises dangereuses par voie de navigation intérieure |
| ADR | Accord européen relatif au transport international des marchandises Dangereuses par Route |
| AICS | Australian Inventory of Chemical Substances |
| ANSI | American National Standards Institute |
| ASTM | American Society of Testing and Materials (US) |
| BCF | Bioconcentration factor |
| CLP | Regulation on Classification, Labelling and Packaging of Substances and Mixtures |
| DIN | Deutsches Institut für Normung |
| DNEL | Derived No-Effect Level |
| DSL | Domestic Substances List |
| EC… | Effect concentration ... % |
| ENCS | Existing Notified Chemical Substances (Japan) |
| EWC | European Waste Catalogue |
| IATA | International Air Transport Association |
| IBC | Intermediate Bulk Container |
| ICAO | International Civil Aviation Organization |
| IMDG | International Maritime Dangerous Goods |
| IMO | International Maritime Organization |
| ISHL | Industrial Safety and Health Law (Japan) |
| ISO | International Organization for Standardization |
| IUAPC | International Union of Pure and Applied Chemistry |
| KECI | Korea Existing Chemicals Inventory |
| LC… | Lethal Concentration, ...% |
| LD… | Lethal Dose, ...% |
| MARPOL | International Convention for the Prevention of Pollution From Ships |
| NDSL | Non-Domestic Substances List |
| NOAEL | no observable adverse effect level |
| NOEL/NOEC | No Observed-effect level/concentration |
| NZIoC | New Zealand Inventory of Chemicals |
| OECD | Organisation for Economic Co-operation and Development |
| PBT | persistent, bioaccumulative, toxic |
| PICCS | Philippine Inventory of Chemicals and Chemical Substances |
| PNEC | Predicted No-Effect Concentration |
| REACH | Registration, Evaluation, Authorisation and Restriction of Chemicals |
| RID | Règlement concernant le transport international ferroviaire de marchandises dangereuses |
| TG | Test Guideline |
| TRGS | Technische Regeln für Gefahrstoffe |
| TSCA | Toxic Substances Control Act |
| vPvB | very persistent, very bioaccumulative |
| WGK | Wassergefährdungsklasse |

## Annex

**Attachments to the safety data sheet and/or lists of the identified uses for the listed substances can be downloaded using the internet links below.**

**Benzene, C10-13-alkyl derivs.**

http://www.sasolgermany.de/fileadmin/doc/productsafety/Annex/000000000327_EN_01.pdf