# SAFETY DATA SHEET

**The Globally Harmonized System of Classification and Labeling of Chemicals (GHS)**

## Aceta star 460 EC

**Revision date** 11-Aug-2022 **Version** 2 **Supersedes Date:** 17-Mar-2020 **Product Code(s)** INS00094-27
**Print Date** 11-Aug-2022 ADM.00152.I.2.A 9502256

## 1. Identification

**Product identifier**

# Aceta star 460 EC

**Other means of identification**

| | |
|---|---|
| **Synonyms** | Acetamiprid 16 Bifenthrin 30 EC |
| **Formulation type** | EC |
| **Registration Number(s)** | L9255 |
| **Pure substance/mixture** | Mixture |

**Recommended use of the chemical and restrictions on use**

| | |
|---|---|
| **Recommended use** | Insecticide |
| **Uses advised against** | No information available |

**Detailed information about the manufacturer, supplier, and/or importer**

**Supplier**
ADAMA SOUTH AFRICA (PTY) LTD
Ground Floor, Simeka House
The Vineyards Office Estate
99 Jip de Jager Drive
Bellville 7530

**Emergency telephone number**

**Emergency Telephone**
+27 82 446 8946 (Griffon Poison Centre)
+27 86 155 5777 (Tygerberg Poison Information Centre)
+27 86 100 6366 and +27 83 253 6618 (SPILL TECH)

**E-mail address** SDS@ADAMA.COM

## 2. Hazard(s) identification

**Classification of the substance or mixture**

| | |
|---|---|
| Aspiration hazard | Category 1 - (H304) |
| Acute toxicity - Oral | Category 4 - (H302) |
| Serious eye damage/eye irritation | Category 1 - (H318) |
| Carcinogenicity | Category 2 - (H351) |
| Specific target organ toxicity (single exposure) | Category 3 - (H336) |
| Acute aquatic toxicity | Category 1 - (H400) |
| Chronic aquatic toxicity | Category 1 - (H410) |

| | |
|---|---|
| Flammable liquids | Category 3 - (H226) |

**Label elements**

**Signal word** Danger

**Hazard pictograms**

**Hazard statements**

H302 - Harmful if swallowed
H304 - May be fatal if swallowed and enters airways
H318 - Causes serious eye damage
H336 - May cause drowsiness or dizziness
H351 - Suspected of causing cancer
H410 - Very toxic to aquatic life with long lasting effects
H226 - Flammable liquid and vapor

**Precautionary statements**

P102 - Keep out of reach of children
P203 - Obtain, read and follow all safety instructions before reuse
P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking
P233 - Keep container tightly closed
P240 - Ground/bond container and receiving equipment
P241 - Use explosion-proof electrical/ ventilating/ lighting/ equipment
P242 - Use only non-sparking tools
P243 - Take action to prevent static discharges
P261 - Avoid breathing dust/fume/gas/mist/vapors/spray
P264 - Wash face, hands and any exposed skin thoroughly after handling
P270 - Do not eat, drink or smoke when using this product
P271 - Use only outdoors or in a well-ventilated area
P273 - Avoid release to the environment
P280 - Wear protective gloves/protective clothing/eye protection/face protection
P301 + P316 - IF SWALLOWED: Get emergency medical help immediately
P303 + P361 + P353 - IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower
P304 + P340 - IF INHALED: Remove person to fresh air and keep comfortable for breathing
P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
P310 - Immediately call a POISON CENTER or doctor
P330 - Rinse mouth
P331 - Do NOT induce vomiting
P370 + P378 - In case of fire: Use dry chemical, CO2, water spray or alcohol-resistant foam to extinguish
P391 - Collect spillage
P403 + P235 - Store in a well-ventilated place. Keep cool
P405 - Store locked up
P501 - Dispose of contents/ container to an approved waste disposal plant

**Additional information**

This product is classified as hazardous according to the criteria in South Africa - GHS classification and labelling of chemicals – SANS10234 and the Regulations for Hazardous Chemical Agents - 2021.

**Other hazards**

The components in this formulation do not meet the criteria for classification as PBT or vPvB.

## 3. Composition/information on ingredients

**Substance**

Not applicable

**Mixture**

**Synonyms** Acetamiprid 16 Bifenthrin 30 EC

| Chemical name | CAS No | Weight-% | EC No | INTERNATIONAL GHS CLASSIFICATION | M-Factor |
|---|---|---|---|---|---|
| Hydrocarbons, C10, aromatics, >1% naphthalene | 64742-94-5 | 58-66 | 919-284-0 | Asp. Tox. 1 (H304)Carc. 2 (H351)Aquatic Chronic 2 (H411)STOT SE 3 (H336) | |
| Cyclohexanone | 108-94-1 | 19-24 | 203-631-1 | Flam. Liq. 3 (H226)<br>Acute Tox. 4 (H332) | |
| Bifenthrin | 82657-04-3 | 2-4 | | Acute Tox. 3 (H301)<br>Acute Tox. 3 (H331)<br>STOT RE 2 (H373)<br>Aquatic Acute 1 (H400)<br>Aquatic Chronic 1 (H410) | M=10000<br>M=100000 |
| calcium dodecylbenzenesulphonate | 26264-06-2 | 2-4 | 247-557-8 | Skin Irrit. 2 (H315)<br>Eye Dam. 1 (H318) | |
| Acetamiprid | 135410-20-7 | 1-3 | 603-921-1 | Acute Tox. 4 (H302)<br>Aquatic Chronic 3 (H412) | |
| 2-Ethylhexan-1-ol | 104-76-7 | 1-3 | 203-234-3 | Skin Irrit. 2 (H315)<br>Eye Irrit. 2 (H319) | |

**Full text of H- and EUH-phrases: see section 16**

**Additional information**
Note: The other ingredients do not cause or contribute towards the correct GHS classification of Aceta star 460EC and are therefore, in terms of the South African Regulations for Hazardous Chemical Agents - 2021. Regulation 14(b), not listed in the table above.

## 4. First-aid measures

**Description of necessary first aid measures**

**General advice** In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible). First aider: Pay attention to self-protection.

**Inhalation** Remove to fresh air. If breathing is irregular or stopped, administer artificial respiration. Call a physician.

**Skin contact** Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. Consult a physician if necessary.

**Eye contact** Immediately flush with plenty of water. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes. Keep eye wide open while rinsing. Seek immediate medical attention/advice.

**Ingestion** Rinse mouth. Do NOT induce vomiting. Get medical attention immediately if symptoms occur.

**For emergency responders**

**Self-protection of the first aider** Use personal protective equipment as required.

**Most important symptoms/effects, acute and delayed**

**Symptoms** None known.

**Indication of immediate medical attention and special treatment needed, if necessary**

**Note to physicians** Treat symptomatically.

## 5. Fire-fighting measures

**Suitable Extinguishing Media**

**Suitable Extinguishing Media** Dry chemical. Carbon dioxide (CO2). Water spray. Alcohol resistant foam.

**Unsuitable extinguishing media** Do not scatter spilled material with high pressure water streams.

**Specific hazards arising from the chemical**

**Specific hazards arising from the chemical** Risk of ignition. Keep product and empty container away from heat and sources of ignition. In the event of fire, cool tanks with water spray. Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.

**Flammable properties** Flammable liquid

**Explosive properties** Not an explosive.

**Specific/special fire-fighting measures**

**Specific/special fire-fighting measures** No information available.

**Special protective equipment and precautions for fire-fighters**

**Special protective equipment for fire-fighters** Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear. Use personal protection equipment.

## 6. Accidental release measures

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

**Personal precautions** Evacuate personnel to safe areas. Use personal protective equipment as required. See section 8 for more information. Avoid contact with skin, eyes or clothing. Ensure adequate ventilation. Keep people away from and upwind of spill/leak. ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area). Pay attention to flashback. Take precautionary measures against static discharges. All equipment used when handling the product must be grounded. Do not touch or walk through spilled material.

**Environmental precautions**

**Environmental precautions** Refer to protective measures listed in Sections 7 and 8. Prevent further leakage or spillage

if safe to do so. Prevent product from entering drains.

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

**Methods for containment** Stop leak if you can do it without risk. Do not touch or walk through spilled material. A vapor suppressing foam may be used to reduce vapors. Dike far ahead of spill to collect runoff water. Keep out of drains, sewers, ditches and waterways. Absorb with earth, sand or other non-combustible material and transfer to containers for later disposal.

**Methods for cleaning up** Take precautionary measures against static discharges. Dam up. Soak up with inert absorbent material. Pick up and transfer to properly labeled containers.

**Prevention of secondary hazards** Clean contaminated objects and areas thoroughly observing environmental regulations.

**Other information** Ventilate the area. Refer to protective measures listed in Sections 7 and 8.

## 7. Handling and storage

**Preventive measures for safe handling**

**Advice on safe handling** Use personal protection equipment. Avoid breathing vapors or mists. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Use grounding and bonding connection when transferring this material to prevent static discharge, fire or explosion. Use with local exhaust ventilation. Use spark-proof tools and explosion-proof equipment. Keep in an area equipped with sprinklers. Use according to package label instructions. Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin, eyes or clothing. Do not eat, drink or smoke when using this product. In case of insufficient ventilation, wear suitable respiratory equipment.

**Precautions for safe handling**

**General hygiene considerations** Handle in accordance with good industrial hygiene and safety practice.

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

**Storage Conditions** Keep containers tightly closed in a dry, cool and well-ventilated place. Keep away from heat, sparks, flame and other sources of ignition (i.e., pilot lights, electric motors and static electricity). Keep in properly labeled containers. Do not store near combustible materials. Keep in an area equipped with sprinklers. Store in accordance with the particular national regulations. Store in accordance with local regulations. Keep out of the reach of children. Store locked up. Store away from other materials.

**Incompatible materials** Strong acids. Strong bases. Strong oxidizing agents.

## 8. Exposure controls/personal protection

**Control parameters**

**Exposure guidelines** This product, as supplied, does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies

| Chemical name | ACGIH TLV |
|---|---|
| Cyclohexanone<br>108-94-1 | STEL: 50 ppm<br>TWA: 20 ppm<br>S* |

**Other information** South Africa for Cyclohexanone, CAS. 108-94-1: OEL eight-hour TWA - 40 mg/m$^3$, OEL-STEL/C -100 mg/m$^3$ (SKIN)

**Appropriate engineering controls**

**Engineering controls** Ensure adequate ventilation, especially in confined areas.

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

**Respiratory protection** In case of insufficient ventilation, wear suitable respiratory equipment.

**Hand protection** Suitable chemical resistant gloves (EN 374) also with prolonged, direct contact (recommendation: protection index 6, corresponding > 480 minutes Permeability time (permeation) according to EN 374): e.g. nitrile rubber (0.4 mm), chloroprene rubber (0.5 mm), butyl rubber (0.7 mm).

**Eye/face protection** Tight sealing safety goggles.

**Skin and body protection** Use suitable protective clothing and equipment if required, such as safety goggles certified to EN 166, gloves certified to EN 374, protective boots certified to EN 13832, and/or a water repellent woven coverall with 65% polyester and 35 % cotton.

**General hygiene considerations** Handle in accordance with good industrial hygiene and safety practice.

**Environmental exposure controls** Local authorities should be advised if significant spillages cannot be contained.

## 9. Physical and chemical properties

**Information on basic physical and chemical properties**

| Property | | Values | Method | Remarks |
|---|---|---|---|---|
| **Appearance** | | | | |
| **Physical state** | : | Liquid | | |
| **Color** | : | yellow | | |
| **Odor** | : | characteristic | | |
| **Odor threshold** | : | No data available | | |
| **pH** | : | 4 - 8 | CIPAC MT 75 | 1 % aqueous solution |
| **Melting point / freezing point** °C | : | - | | Not applicable |
| **Boiling point / boiling range** °C | : | No data available | | |
| **Flash point** °C | : | 50 | CIPAC MT 12 | |
| **Evaporation rate** | : | No data available | | |
| **Flammability (solid, gas)** | : | Not applicable for liquids | | |
| **Upper/lower flammability or explosive limits** | : | No data available | | |
| **Vapor pressure** kPa | : | - | | Not applicable |
| **Vapor density** | : | No data available | | |
| **Relative density** | : | 0.87 - 0.97 | CIPAC MT 3 | |
| **Solubility(ies)** mg/l | : | - | | Not applicable |
| **Partition coefficient Log Pow** | : | | | See Section 12 for additional Ecological Information |
| **Autoignition temperature** °C | : | No data available | | |
| **Decomposition temperature** °C | : | No data available | | |
| **Kinematic viscosity** mm2/s 40 °C | : | 6.62 | OECD 114 | 23°C |
| **Explosive properties** | : | Not an explosive | | |
| **Oxidizing properties** | : | No data available | | |
| **Surface tension** | : | 46.6 | OECD 115 | 20°C |
| **Particle Size** | : | Not applicable | | |

**Other information**

**Bulk density** g/ml : Not applicable

## 10. Stability and reactivity

**Reactivity**

**Reactivity** No information available.

**Chemical stability**

**Stability** Stable under normal conditions.

**Explosion data**
**Sensitivity to mechanical impact** None.
**Sensitivity to static discharge** Yes.

**Possibility of hazardous reactions**

**Possibility of hazardous reactions** None under normal processing.

**Conditions to avoid**

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

**Incompatible materials**

**Incompatible materials** Strong acids. Strong bases. Strong oxidizing agents.

**Hazardous decomposition products**

**Hazardous decomposition products** None known based on information supplied.

## 11. Toxicological information

**Information on toxicological effects**

**Acute toxicity**

| | | Values | Species | Method | Remarks |
|---|---|---|---|---|---|
| **Oral LD50 mg/kg** | : | 1098 | Rat | OECD 425 | |
| **Dermal LD50 mg/kg** | : | > 2000 | Rat | OECD 402 | |
| **Inhalation LC50 LC50** | : | > 2.5 | Rat | OECD 403 | Maximum attainable concentration |
| **Skin corrosion/irritation** | : | Non-irritating to the skin | Rabbit | OECD 404 | |
| **Serious eye damage/eye irritation** | : | Severely irritating to eyes | Rabbit | OECD 405 | |
| **Sensitization** | : | Not a skin sensitizer | Guinea pig | OECD 406 | |

**Chronic toxicity**

**Germ cell mutagenicity**
**Chemical name**
Bifenthrin : Not classified
Acetamiprid : Not classified

**Carcinogenicity** .
**Chemical name**
Bifenthrin : Not classified
Acetamiprid : Not Carcinogenic

**Reproductive toxicity** .
**Chemical name**
Bifenthrin : Not classified

| | | |
|---|---|---|
| Acetamiprid | : | Not toxic for the reproductive system |

**STOT - Single Exposure**
**Chemical name**

| | | |
|---|---|---|
| Bifenthrin | : | No data available |
| Acetamiprid | : | No data available |

**STOT - Repeated Exposure**
**Chemical name**

| | | |
|---|---|---|
| Bifenthrin | : | No data available |
| Acetamiprid | : | No data available |

**Aspiration hazard**
**Chemical name**

| | | |
|---|---|---|
| Bifenthrin | : | No data available |
| Acetamiprid | : | No data available |

## 12. Ecological information

**Ecotoxicity**

### Aquatic toxicity

| **Acute toxicity** | | **Values** | **Species** | **Method** | **Remarks** |
|---|---|---|---|---|---|
| **Fish 96-hour LC50 mg/l** | : | 0.49 | Poecilia reticulata | OECD 203 | |
| **Crustacea 48-hour EC50 mg/l** | : | 0.4 | Daphnia magna | OECD 202 | |
| **Algae 72-hour EC50 mg/l** | : | 0.49 | S. capricornutum | OECD 201 | |
| **Other plants EC50 mg/l** | : | ---- | | | No data available |

| **Chronic aquatic toxicity** | | **Values** | **Species** | **Method** | **Remarks** |
|---|---|---|---|---|---|
| **Fish NOEC mg/l** | : | No data available | | | |
| **Crustacea NOEC mg/l** | : | No data available | | | |
| **Algae NOEC mg/l** | : | No data available | | | |
| **Other plants NOEC mg/l** | : | No data available | | | |

**Terrestrial Toxicity**
**Birds Oral LD50 mg/kg**
**Chemical name**

| | | | | | |
|---|---|---|---|---|---|
| Bifenthrin | : | 1800 | Bobwhite quail | EPA-OPPTS 850.2100 | |
| Acetamiprid | : | 98 | Mallard duck | | |

**Bees Oral LD50 µg/bee**
**Chemical name**

| | | | | | |
|---|---|---|---|---|---|
| Bifenthrin | : | 0.39 | | OECD 213 OECD 214 | Oral |
| Acetamiprid | : | 14.53 | | | Oral |

**Abiotic Degradation**
**Water DT50 days**
**Chemical name**

| | | |
|---|---|---|
| Bifenthrin | : | 161.1 |
| Acetamiprid | : | 3.6 - 5.8 |

**Soil DT50 days**
**Chemical name**

| | | | |
|---|---|---|---|
| Bifenthrin | : | 86.8 | Field |
| Acetamiprid | : | 2.9 | Field |

**Biodegradation**

| Chemical name | |
|---|---|
| Bifenthrin | : No data available |
| Acetamiprid | : No data available |

| Log Pow<br>Chemical name | Values | Method | Remarks |
|---|---|---|---|
| Bifenthrin | : > 6.71 | OECD 107 | |
| Acetamiprid | : 0.80 | OECD 117 | |

**Bioconcentration factor (BCF)**

| Chemical name | | | |
|---|---|---|---|
| Bifenthrin | : 417 | OECD 305 | |
| Acetamiprid | : ---- | | No bioaccumulation potential |

| Adsorption/Desorption<br>Chemical name | Values | Method | Remarks |
|---|---|---|---|
| Bifenthrin | : 236,610 | | KOC Not mobile |
| Acetamiprid | : 71.1 - 138.4 | | KOC |

## 13. Disposal considerations

**Disposal methods**

**Waste from residues/unused products** Dispose of in accordance with local regulations. Dispose of waste in accordance with environmental legislation.

**Contaminated packaging** Empty containers pose a potential fire and explosion hazard. Do not cut, puncture of weld containers.

## 14. Transport information

**ADR**

| | |
|---|---|
| **14.1 UN number** | UN1993 |
| **14.2 UN proper shipping name** | FLAMMABLE LIQUID, N.O.S. (Cyclohexanone) |
| **14.3 Transport hazard class(es)** | 3 |
| **Labels** | 3 |
| **14.4 Packing group** | III |
| **Description** | UN1993, FLAMMABLE LIQUID, N.O.S. (Cyclohexanone), 3, III, (D/E), Environmentally Hazardous |
| **14.5 Environmental hazard** | Yes |
| **14.6 Special Precautions for Users** | |
| **Special Provisions** | 274, 601 |
| **Classification code** | F1 |
| **Tunnel restriction code** | (D/E) |

**RID**

| | |
|---|---|
| **14.1 UN number** | UN1993 |
| **14.2 UN proper shipping name** | FLAMMABLE LIQUID, N.O.S. (Cyclohexanone) |
| **14.3 Transport hazard class(es)** | 3 |
| **Labels** | 3 |
| **14.4 Packing group** | III |
| **Description** | UN1993, FLAMMABLE LIQUID, N.O.S. (Cyclohexanone), 3, III, Environmentally Hazardous |
| **14.5 Environmental hazard** | Yes |
| **14.6 Special Precautions for Users** | |

| | |
|---|---|
| **Special Provisions** | 274, 601 |
| **Classification code** | F1 |

**IMDG**

| | |
|---|---|
| **14.1 UN number** | UN1993 |
| **14.2 UN proper shipping name** | FLAMMABLE LIQUID, N.O.S. (Cyclohexanone, Bifenthrin) |
| **14.3 Hazard Class** | 3 |
| **14.4 Packing group** | III |
| **Description** | UN1993, FLAMMABLE LIQUID, N.O.S. (Cyclohexanone, Bifenthrin), 3, III, (50°C C.C.), Marine pollutant |
| **14.5 Marine pollutant** | P |
| **Environmental hazard** | Yes |
| **14.6 Special Precautions for Users** | |
| **Special Provisions** | 223, 274, 955 |
| **EmS-No** | F-E, S-E |
| **IMDG Stowage and segregation** | Category A |
| **14.7. Transport in bulk according to Annex II of MARPOL and the IBC Code** | No information available |

**IATA**

| | |
|---|---|
| **14.1 UN number** | UN1993 |
| **14.2 UN proper shipping name** | FLAMMABLE LIQUID, N.O.S. (Cyclohexanone) |
| **14.3 Transport hazard class(es)** | 3 |
| **14.4 Packing group** | III |
| **Description** | UN1993, FLAMMABLE LIQUID, N.O.S. (Cyclohexanone), 3, III |
| **14.5 Environmental hazard** | Yes |
| **14.6 Special Precautions for Users** | |
| **Special Provisions** | A3 |
| **ERG Code** | 3L |


## 15. Regulatory information

**Safety, health and environmental regulations specific for the product in question**

Registration Requirements: Fertilizer, Farm Feeds, Agricultural Remedies and Stock Remedies Act, 1947 (Act 36 of 1947).Pesticide Handling, Storage and Disposal Safety: SANS10206: 2020.Safety Data Sheet and Occupational Exposure Limit Requirements: Regulations for Hazardous Chemical Agents – 2021 – SA Occupational Health and Safety Act. SANS11014:2010.Control of and handling of poisonous/hazardous and non-poisonous/non-hazardous substances/chemicals in workplaces: Hazardous Substances Act, 1973 (Act No.15 of 1973). Occupational Health and Safety Act No. 85 of 1993.

## 16. Other information

**Full text of H-Statements referred to under section 3**
H226 - Flammable liquid and vapor
H301 - Toxic if swallowed
H302 - Harmful if swallowed
H304 - May be fatal if swallowed and enters airways
H315 - Causes skin irritation

H318 - Causes serious eye damage
H319 - Causes serious eye irritation
H331 - Toxic if inhaled
H332 - Harmful if inhaled
H336 - May cause drowsiness or dizziness
H351 - Suspected of causing cancer
H373 - May cause damage to organs through prolonged or repeated exposure
H400 - Very toxic to aquatic life
H410 - Very toxic to aquatic life with long lasting effects
H411 - Toxic to aquatic life with long lasting effects
H412 - Harmful to aquatic life with long lasting effects

**Date of preparation of the SDS** No data available

**Revision date** 11-Aug-2022

**Revision Note** Changes made to the last version are labeled with this sign ***.

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

| | |
|---|---|
| IMDG | International Maritime Dangerous Goods (IMDG) |
| IATA | International Air Transport Association (IATA) |
| ADR | European Agreement concerning the International Carriage of Dangerous Goods by Road |

**Legend** Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

| | | | |
|---|---|---|---|
| TWA | TWA (time-weighted average) | STEL | STEL (Short Term Exposure Limit) |
| Ceiling | Maximum limit value | * | Skin designation |

**Abbreviations and acronyms**

ADR - European Agreement concerning the International Carriage of Dangerous Goods by Road
ADN - European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
CAS Number - Chemical Abstracts Service number
EC Number - EINECS and ELINCS Number
EINECS - European Inventory of Existing Commercial Substances
ELINCS - European List of notified Chemical Substances
IATA - International Air Transport Association
ICAO-TI - Technical Instructions for the Safe Transport of Dangerous Goods by Air
IMDG - International Maritime Dangerous Goods
LC50 - Lethal Concentration to 50 % of a test population
LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose)
OECD - Organization for Economic Co-operation and Development
PBT - Persistent, Bioaccumulative and Toxic substance
RID - Regulations concerning the International Carriage of Dangerous Goods by Rail
STOT - Specific Target Organ Toxicity
vPvB - Very Persistent and Very Bioaccumulative

**The Globally Harmonized System of Classification and Labeling of Chemicals (GHS)**

| **Classification of the mixture** | **Classification procedure** |
|---|---|
| H302 - Harmful if swallowed | Classification based on test data |
| H304 - May be fatal if swallowed and enters airways | Classification based on Calculation method |
| H318 - Causes serious eye damage | Classification based on test data |
| H336 - May cause drowsiness or dizziness | Classification based on Calculation method |
| H351 - Suspected of causing cancer | Classification based on Calculation method |
| H400 - Very toxic to aquatic life | Classification based on test data |
| H410 - Very toxic to aquatic life with long lasting effects | Classification based on Calculation method |
| H226 - Flammable liquid and vapor | Classification based on Calculation method |

**Disclaimer**

**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**

**End of Safety Data Sheet**