

SAFETY DATA SHEET

AESUB diamond

SECTION 1: Identification

1.1. Product identifier

Trade name

AESUB diamond

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

Relevant identified uses of the substance or mixture

Industrial purposes

Restricted to professional users.

Uses advised against

None known.

1.3. Details of the supplier of the safety data sheet

Company and address

Scanningspray Vertriebs GmbH

Johann-Strauss-Str. 13

45657 Recklinghausen

Germany

+49 (0)2361 8903 357

info@aesub.com

Contact person

Max Liese

E-mail

liese@aesub.com

SDS date

10/11/2023

SDS Version

1.0

1.4. Emergency telephone number

US Chemtrec: +1 800 424-9300 (24h)

CHEMTREC: +1 703 527-3887 (24h) Transport

(CCN 994267 / WISAG FMO Cargo Service GmbH & Co. KG);

SECTION 2: Hazard(s) identification

OSHA/HCS status

This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200)

2.1. Classification of the substance or mixture

Aerosol 1; H222, H229, Extremely flammable aerosol. Pressurised container: May burst if heated.

STOT SE 3; H336, May cause drowsiness or dizziness.

2.2. Label elements

Hazard pictogram(s)



Signal word

Danger

Hazard statement(s)

Extremely flammable aerosol. Pressurised container: May burst if heated. (H222, H229)

May cause drowsiness or dizziness. (H336)

Precautionary statement(s)

General

Conforms to OSHA Hazard Communication Standard (HCS) (29 CFR 1910.1200 / revised 2012)

Prevention

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. (P210)
 Do not spray on an open flame or other ignition source. (P211)
 Do not pierce or burn, even after use. (P251)
 Avoid breathing spray. (P261)

Response

Call a POISON CENTER/doctor if you feel unwell. (P312)

Storage

Store in a well-ventilated place. Keep container tightly closed. (P403+P233)
 Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122°F. (P410+P412)

Disposal

Dispose of contents/container in accordance with local regulation (P501)

Additional labelling

Not applicable.

2.3. Other hazards

Additional warnings

In the event of leaks, high concentrations of gases can quickly form. They can be toxic, asphyxiating, or explosive.
 This mixture/product does not contain any substances considered to meet the criteria classifying them as PBT and/or vPvB.

SECTION 3: Composition/Information on Ingredients

3.1. Substances

Not applicable. This product is a mixture.

3.2. Mixtures

| Product/substance | Identifiers | % w/w | Classification | Note |
|--|-------------------|--------|--|------|
| isobutane (containing ≥ 0,1 % butadiene (203-450-8));butane (containing ≥ 0,1 % butadiene (203-450-8)) | CAS No.: 106-97-8 | 40-60% | Flam. Gas 1A, H220 Press. Gas (Liq.) , H280 | |
| propane | CAS No.: 74-98-6 | 15-25% | Flam. Gas 1A, H220 Press. Gas (Liq.) , H280 | |
| ethanol;ethyl alcohol | CAS No.: 64-17-5 | 10-15% | Flam. Liq. 2, H225 Eye Irrit. 2, H319 (SCL: 50.00 %) | |
| cyclopentane | CAS No.: 287-92-3 | 5-10% | Flam. Liq. 2, H225 Asp. Tox. 1, H304 STOT SE 3, H336 | |
| Tricyclo[3.3.1.1 ^{3,7}]decane | CAS No.: 281-23-2 | 1-3% | | |
| isobutane (containing ≥ 0,1 % butadiene (203-450-8));butane (containing ≥ 0,1 % butadiene (203-450-8)) | CAS No.: 75-28-5 | 1-3% | Flam. Gas 1A, H220 Press. Gas (Liq.) , H280 | |

Where the concentration of an ingredient is expressed as a range the exact concentration has been withheld as a trade secret.

See full text of H-phrases in section 16. Occupational exposure limits are listed in section 8, if these are available.

Other information

-

SECTION 4: First-aid measures

4.1. Description of first aid measures

Conforms to OSHA Hazard Communication Standard (HCS) (29 CFR 1910.1200 / revised 2012)

General information

If breathing is irregular, drowsiness, loss of consciousness or cramps: Call 911 and give immediate treatment (first aid).

Contact a doctor if in doubt about the injured person's condition or if the symptoms persist. Never give an unconscious person water or other drink.

Inhalation

Upon breathing difficulties or irritation of the respiratory tract: Bring the person into fresh air and stay with him/her.

Skin contact

Upon irritation: rinse with water. In the event of continued irritation, seek medical assistance.

Eye contact

If in eyes: Flush eyes with water or saline water (20-30 °C) for at least 5 minutes. Remove contact lenses. Seek medical assistance and continue flushing during transport.

Ingestion

If the person is conscious, rinse the mouth with water and stay with the person. Never give the person anything to drink.

In case of malaise, seek medical advice immediately and bring the safety data sheet or label from the product. Do not induce vomiting, unless recommended by the doctor. Have the person lean forward with head down to avoid inhalation of or choking on vomited material.

Burns

Rinse with water until pain stops then continue to rinse for 30 minutes.

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

None known.

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

Call a POISON CENTER/doctor if you feel unwell.

Information to medics

Bring this safety data sheet or the label from this product.

SECTION 5: Fire-fighting measures

5.1. Extinguishing media

Suitable extinguishing media: Alcohol-resistant foam, carbon dioxide, powder, water mist.

Unsuitable extinguishing media: Waterjets should not be used, since they can spread the fire.

5.2. Special hazards arising from the substance or mixture

Extremely flammable aerosol. Pressurised container. In a fire or if heated, a pressure increase will occur and the container may burst.

In use may form flammable/explosive vapour-air mixture.

Fire will result in dense smoke. Exposure to combustion products may harm your health. Closed containers, which are exposed to fire, should be cooled with water. Do not allow fire-extinguishing water to enter the sewage system and nearby surface waters.

If the product is exposed to high temperatures, e.g. in the event of fire, dangerous decomposition compounds are produced. These are:

Carbon oxides (CO / CO₂)

5.3. Advice for firefighters

Wear self-contained breathing apparatus and protective clothing to prevent contact. Upon direct exposure contact the Poison Help Line on 1-800-222-1222 (24/7) in order to obtain further advice.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Accidental releases always pose a serious risk of fire or explosion.

Storages not yet ignited must be cooled by water mist. Remove flammable materials if conditions allow it. Ensure sufficient ventilation.

Ensure adequate ventilation, especially in confined areas.

Avoid inhalation of vapours from spilled material.

6.2. Environmental precautions

Avoid discharge to lakes, streams, sewers, etc.

Keep unauthorized persons away from the spill

6.3. Methods and material for containment and cleaning up

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.

Conforms to OSHA Hazard Communication Standard (HCS) (29 CFR 1910.1200 / revised 2012)

Wherever possible cleaning should be performed with normal cleaning agents. Avoid use of solvents.

6.4. Reference to other sections

See section 13 "Disposal considerations" on handling of waste.

See section 8 "Exposure controls/personal protection" for protective measures.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Because of the danger of self-ignition, any waste from the product, spray mist and soiled rags etc. are to be kept in a fire-proof place in air-tight containers, alternatively the waste is to be burned.

Do not spray on an open flame or other ignition source.

Do not pierce or burn, even after use.

Avoid contact during pregnancy and while nursing.

Smoking, drinking and consumption of food is not allowed in the work area.

See section 8 "Exposure controls/personal protection" for information on personal protection.

7.2. Conditions for safe storage, including any incompatibilities

Must be stored in a cool and well-ventilated area, away from possible sources of ignition.

Pressurized gas packs (spray cans, aerosol cans) must be stored behind a wire mesh, which allows gases to escape and holds back packs flying around.

Recommended storage material

Keep only in original packaging.

Storage temperature

< 50°C

Dry, cool and well ventilated

Incompatible materials

Strong oxidizing agents

7.3. Specific end use(s)

This product should only be used for applications quoted in section 1.2.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

propane

Long term exposure limit (OSHA Table Z-1) (mg/m³): 1800

Long term exposure limit (OSHA Table Z-1) (ppm): 1000

ethanol;ethyl alcohol

Short term exposure limit (STEL) (ACGIH TLV) (ppm): 1000

Long term exposure limit (OSHA Table Z-1) (mg/m³): 1900

Long term exposure limit (OSHA Table Z-1) (ppm): 1000

Part 1910 - Occupational Safety and Health Standards (29 CFR 1910.1000 TABLE Z-1 - Limits for Air Contaminants)

8.2. Exposure controls

Compliance with the given occupational exposure limits values should be controlled on a regular basis.

General recommendations

Smoking, drinking and consumption of food is not allowed in the work area.

Exposure scenarios

There are no exposure scenarios implemented for this product.

Exposure limits

Professional users are subjected to the legally set maximum concentrations for occupational exposure. See occupational hygiene limit values above.

Appropriate technical measures

Apply standard precautions during use of the product. Avoid inhalation of gas or dust.

Hygiene measures

In between use of the product and at the end of the working day all exposed areas of the body must be washed thoroughly. Always wash hands, forearms and face.

Measures to avoid environmental exposure

No specific requirements.


Individual protection measures, such as personal protective equipment

Generally


Conforms to OSHA Hazard Communication Standard (HCS) (29 CFR 1910.1200 / revised 2012)

Use only protective equipment with a recognized certification mark, e.g. the UL mark.


Respiratory Equipment

| Type | Class | Colour | Standards | |
|-----------------------------------|---------|-----------------------------------|-----------|---|
| Combination filter A2B2E2K2-P2 | Class 2 | Brown/Gray/Yellow/Green /White | EN14387 |  |


Skin protection

| Recommended | Type/Category | Standards | |
|---|---------------|-----------|---|
| Dedicated work clothing should be worn. | - | - |  |

Hand protection

| Material | Glove thickness (mm) | Breakthrough time (min.) | Standards | |
|----------|----------------------|-----------------------------|-----------------------------------|---|
| Butyl | 0,7 | > 240 | EN374-2, EN374-3, EN388, EN421 |  |

Eye protection

| Type | Standards | |
|--|-----------|--|
| Face shield alternatively safety glasses with side shields. | EN166 |  |

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state

Aerosol

Colour

Colourless

Odour

Characteristic

Odour threshold (ppm)

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

pH

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

Density (g/cm³)

0,58 - 0,62 (20 °C)

Kinematic viscosity

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

Phase changes

Melting point (°F)

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

Softening point/range (waxes and pastes) (°F)

Does not apply to aerosols.

Boiling point (°F)

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

Vapour pressure

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

Vapour density

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

Decomposition temperature (°F)

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

Data on fire and explosion hazards

Conforms to OSHA Hazard Communication Standard (HCS) (29 CFR 1910.1200 / revised 2012)

Flash point (°F)

Does not apply to aerosols.

Flash point (°C)

-88,6 @ 1.013 hPa

Flammability (°F)

The material is ignitable.

Flammability (°C)

287

Auto-ignition temperature (°F)

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

Explosion limits (% v/v)

1.1 - 15

Solubility

Solubility in water

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

n-octanol/water coefficient

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

Solubility in fat (g/L)

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

9.2. Other information

Other physical and chemical parameters

No data available.

Oxidizing properties

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

SECTION 10: Stability and reactivity

10.1. Reactivity

No data available.

10.2. Chemical stability

The product is stable under the conditions, noted in section 7 "Handling and storage".

10.3. Possibility of hazardous reactions

None known.

10.4. Conditions to avoid

Do not expose to any forms of heat (e.g. solar radiation). May lead to excess pressure.

Sunlight

10.5. Incompatible materials

Strong oxidizing agents

10.6. Hazardous decomposition products

The product is not degraded when used as specified in section 1.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity

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

Skin corrosion/irritation

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

Serious eye damage/irritation

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

Respiratory sensitisation

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

Skin sensitisation

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

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

Conforms to OSHA Hazard Communication Standard (HCS) (29 CFR 1910.1200 / revised 2012)

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

STOT-single exposure

May cause drowsiness or dizziness.

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.

Long term effects

None known.

Other information

None known.

SECTION 12: Ecological information

12.1. Toxicity

| | |
|-------------------|--|
| Product/substance | isobutane (containing $\geq 0,1$ % butadiene (203-450-8));butane (containing $\geq 0,1$ % butadiene (203-450-8)) |
| Species: | Fish |
| Duration: | 96 hours |
| Test: | LC50 |
| Result: | 27,98 mg/L |

| | |
|-------------------|--|
| Product/substance | isobutane (containing $\geq 0,1$ % butadiene (203-450-8));butane (containing $\geq 0,1$ % butadiene (203-450-8)) |
| Species: | Algae |
| Duration: | 96 hours |
| Test: | EC50 |
| Result: | 7,71 mg/L |

| | |
|-------------------|------------|
| Product/substance | propane |
| Species: | Fish |
| Duration: | 96 hours |
| Test: | LC50 |
| Result: | 27,98 mg/L |

| | |
|-------------------|-----------|
| Product/substance | propane |
| Species: | Algae |
| Duration: | 96 hours |
| Test: | EC50 |
| Result: | 7,71 mg/L |

| | |
|-------------------|--------------|
| Product/substance | cyclopentane |
| Species: | Fish |
| Duration: | 96 hours |
| Test: | LL50 |
| Result: | 29.3 mg/L |

| | |
|-------------------|--|
| Product/substance | isobutane (containing $\geq 0,1$ % butadiene (203-450-8));butane (containing $\geq 0,1$ % butadiene (203-450-8)) |
| Species: | Fish |
| Duration: | 96 hours |
| Test: | LC50 |
| Result: | 27,98 mg/L |

| | |
|-------------------|--|
| Product/substance | isobutane (containing $\geq 0,1$ % butadiene (203-450-8));butane (containing $\geq 0,1$ % butadiene (203-450-8)) |
| Species: | Algae |
| Duration: | 96 hours |
| Test: | EC50 |
| Result: | 7,71 mg/L |

12.2. Persistence and degradability

| | |
|-------------------|-----------------------|
| Product/substance | ethanol;ethyl alcohol |
| Biodegradable: | Yes |
| Result: | 69% 5d |

| | |
|-------------------|--------------|
| Product/substance | cyclopentane |
| Biodegradable: | No |

Conforms to OSHA Hazard Communication Standard (HCS) (29 CFR 1910.1200 / revised 2012)

Result: 0% 28d

12.3. Bioaccumulative potential

Product/substance propane
 Potential bioaccumulation: No data available.
 LogPow: 1,09 (pH: 7, 20 °C)
 BCF: No data available.

Product/substance ethanol;ethyl alcohol
 Potential bioaccumulation: No
 LogPow: -0,77
 BCF: No data available.

Product/substance cyclopentane
 Potential bioaccumulation: No data available.
 LogPow: 3 (pH: 7, 25 °C)
 BCF: 70,8

Product/substance Tricyclo[3.3.1.1^{3,7}]decane
 Potential bioaccumulation: No data available.
 LogPow: 4,24
 BCF: No data available.

12.4. Mobility in soil

No data available.

12.5. Results of PBT and vPvB assessment

This mixture/product does not contain any substances considered to meet the criteria classifying them as PBT and/or vPvB.

12.6. Other adverse effects

None known.

SECTION 13: Disposal considerations

RCRA Hazardous waste ("P" and "U" list) (40 CFR 261)



None of the components are listed

Specific labelling

Contaminated packing

Packaging containing residues of the product must be disposed of similarly to the product.

SECTION 14: Transport information

| | 14.1 UN / ID | 14.2 UN proper shipping name | 14.3 Hazard class(es) | 14.4 PG* | 14.5 Env** | Other information: |
|------|-----------------|---------------------------------|---|-------------|---------------|--|
| DOT | UN1950 | AEROSOLS | Transport hazard class: 2 Label: 2.1 Classification code: 5F  | - | No | Limited quantities: 1 L Tunnel restriction code: (D) See below for additional information. |
| IMDG | UN1950 | AEROSOLS | Transport hazard class: 2 Label: 2.1 Classification code: 5F  | - | No | Limited quantities: 1 L EmS: F-D S-U See below for additional information. |
| IATA | UN1950 | AEROSOLS | Transport hazard class: 2 Label: 2.1 Classification code: 5F | - | No | See below for additional information. |

Conforms to OSHA Hazard Communication Standard (HCS) (29 CFR 1910.1200 / revised 2012)

| 14.1 UN / ID | 14.2 UN proper shipping name | 14.3 Hazard class(es) | 14.4 PG* | 14.5 Env** | Other information: |
|-----------------|---------------------------------|---|-------------|---------------|-----------------------|
| | |  | | | |

* Packing group

** Environmental hazards

Additional information

ADR / See Table A, Section 3.2.1 for any information on special provisions, requirements, or warnings in connection with transport. See section 5.4.3, for instructions in writing regarding mitigation of damages in relation to incidents or accidents during transport.

IMDG / See section 3.2.1, for any information on special provisions, requirements, or warnings in connection with transport.

IATA / See Table 4.2 for any information on special provisions, requirements, or warnings in connection with transport.

This product is within scope of the regulations of transport of dangerous goods.

14.6. Special precautions for user

Not applicable.

14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

No data available.

SECTION 15: Regulatory information

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

15.2. U.S. Federal regulations

TSCA

isobutane (containing $\geq 0,1$ % butadiene (203-450-8));butane (containing $\geq 0,1$ % butadiene (203-450-8)) is listed in the non-confidential portion

propane is listed in the non-confidential portion

ethanol;ethyl alcohol is listed in the non-confidential portion

cyclopentane is listed in the non-confidential portion

Tricyclo[3.3.1.1^{3,7}]decane is listed in the non-confidential portion

isobutane (containing $\geq 0,1$ % butadiene (203-450-8));butane (containing $\geq 0,1$ % butadiene (203-450-8)) is listed in the non-confidential portion

Clean Air Act

isobutane (containing $\geq 0,1$ % butadiene (203-450-8));butane (containing $\geq 0,1$ % butadiene (203-450-8)) is regulated by section 112(r) with a reportable quantity (RQ) of: 10000 pounds

propane is regulated by section 112(r) with a reportable quantity (RQ) of: 10000 pounds

isobutane (containing $\geq 0,1$ % butadiene (203-450-8));butane (containing $\geq 0,1$ % butadiene (203-450-8)) is regulated by section 112(r) with a reportable quantity (RQ) of: 10000 pounds

EPCRA Section 302

None of the components are listed

EPCRA Section 304

None of the components are listed

EPCRA section 313

None of the components are listed

CERCLA

None of the components are listed

State regulations

California / Prop. 65

None of the components are listed

Massachusetts / Right To Know Act

isobutane (containing $\geq 0,1$ % butadiene (203-450-8));butane (containing $\geq 0,1$ % butadiene (203-450-8)) is listed

propane is listed

ethanol;ethyl alcohol is listed

cyclopentane is listed

isobutane (containing $\geq 0,1$ % butadiene (203-450-8));butane (containing $\geq 0,1$ % butadiene (203-450-8)) is listed

New Jersey / Right To Know Act

isobutane (containing $\geq 0,1$ % butadiene (203-450-8));butane (containing $\geq 0,1$ % butadiene (203-450-8)) / Substance number: 0273

Conforms to OSHA Hazard Communication Standard (HCS) (29 CFR 1910.1200 / revised 2012)

isobutane (containing $\geq 0,1$ % butadiene (203-450-8));butane (containing $\geq 0,1$ % butadiene (203-450-8)) is on the Special Health Hazard Substance List

—
propane / Substance number: 1594
propane is on the Special Health Hazard Substance List

—
ethanol;ethyl alcohol / Substance number: 0844
ethanol;ethyl alcohol is on the Special Health Hazard Substance List

—
cyclopentane / Substance number: 0583
cyclopentane is on the Special Health Hazard Substance List

—
isobutane (containing $\geq 0,1$ % butadiene (203-450-8));butane (containing $\geq 0,1$ % butadiene (203-450-8)) / Substance number: 1040
isobutane (containing $\geq 0,1$ % butadiene (203-450-8));butane (containing $\geq 0,1$ % butadiene (203-450-8)) is on the Special Health Hazard Substance List

New York / Right To Know Act

isobutane (containing $\geq 0,1$ % butadiene (203-450-8));butane (containing $\geq 0,1$ % butadiene (203-450-8)) is listed
isobutane (containing $\geq 0,1$ % butadiene (203-450-8));butane (containing $\geq 0,1$ % butadiene (203-450-8)) is regulated with a Treshold Reporting Quantity (TRQ) of: 10 pounds

—
propane is listed
propane is regulated with a Treshold Reporting Quantity (TRQ) of: 10 pounds

—
ethanol;ethyl alcohol is listed
ethanol;ethyl alcohol is regulated with a Treshold Reporting Quantity (TRQ) of: 0 pounds

—
cyclopentane is listed
cyclopentane is regulated with a Treshold Reporting Quantity (TRQ) of: 10 pounds

—
isobutane (containing $\geq 0,1$ % butadiene (203-450-8));butane (containing $\geq 0,1$ % butadiene (203-450-8)) is listed
isobutane (containing $\geq 0,1$ % butadiene (203-450-8));butane (containing $\geq 0,1$ % butadiene (203-450-8)) is regulated with a Treshold Reporting Quantity (TRQ) of: 10 pounds

Pennsylvania / Right To Know Act

isobutane (containing $\geq 0,1$ % butadiene (203-450-8));butane (containing $\geq 0,1$ % butadiene (203-450-8)) is listed

—
propane is listed

—
ethanol;ethyl alcohol is listed

—
cyclopentane is listed

—
isobutane (containing $\geq 0,1$ % butadiene (203-450-8));butane (containing $\geq 0,1$ % butadiene (203-450-8)) is listed

15.4. Restrictions for application

Restricted to professional users.

Pregnant women and women breastfeeding must not be exposed to this product. The risk, and possible technical precautions or design of the workplace needed to eliminate exposure, must be considered.

15.5. Demands for specific education

No specific requirements.

15.6. Additional information

Not applicable.

15.7. Chemical safety assessment

No

15.8. Sources

OSHA Hazard Communication Standard (29 CFR 1910.1200)

SECTION 16: Other information

Full text of H-phrases as mentioned in section 3

Conforms to OSHA Hazard Communication Standard (HCS) (29 CFR 1910.1200 / revised 2012)

H220, Extremely flammable gas.
H225, Highly flammable liquid and vapour.
H280, Contains gas under pressure; may explode if heated.
H304, May be fatal if swallowed and enters airways.
H319, Causes serious eye irritation.
H336, May cause drowsiness or dizziness.

The full text of identified uses as mentioned in section 1

None known.

Abbreviations and acronyms

ACGIH = American Conference of Governmental Industrial Hygienists
ADN = European Provisions concerning the International Carriage of Dangerous Goods by Inland Waterway
ADR = The European Agreement concerning the International Carriage of Dangerous Goods by Road
ATE = Acute Toxicity Estimate
BCF = Bioconcentration Factor
CAS = Chemical Abstracts Service
CERCLA = Comprehensive Environmental Response Compensation and Liability Act
DOT = Department of Transportation
EINECS = European Inventory of Existing Commercial chemical Substances
EPCRA = Emergency Planning and Community Right-To-Know Act
GHS = Globally Harmonized System of Classification and Labelling of Chemicals
HCIS = Hazardous Chemical Information System
HNOC = Hazards Not Otherwise Classified
IARC = International Agency for Research on Cancer
IATA = International Air Transport Association
IMDG = International Maritime Dangerous Goods
LogPow = logarithm of the octanol/water partition coefficient
MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)
NFPA = National Fire Protection Association
NIOSH = National Institute for Occupational Safety and Health
OECD = Organisation for Economic Co-operation and Development
OSHA = Occupational Safety and Health Administration
PBT = Persistent, Bioaccumulative and Toxic
RCRA = Resource Conservation and Recovery Act
RID = The Regulations concerning the International Carriage of Dangerous Goods by Rail
RRN = REACH Registration Number
SARA = Superfund Amendments and Reauthorization Act
SCL = A specific concentration limit.
STEL = Short-term exposure limits
STOT-RE = Specific Target Organ Toxicity - Repeated Exposure
STOT-SE = Specific Target Organ Toxicity - Single Exposure
TSCA = The Toxic Substances Control Act
TWA = Time weighted average
UN = United Nations
UVBC = Unknown or variable composition, complex reaction products or of biological materials
VOC = Volatile Organic Compound
vPvB = Very Persistent and Very Bioaccumulative

Additional information

The classification of the mixture in regard of health hazards is in accordance with the calculation methods given by HCS (29 CFR 1910.1200).

The classification of the mixture in regard to physical hazards has been based on experimental data.

The safety data sheet is validated by

Max Liese

Other

A change (in proportion to the last essential change (first cipher in SDS version, see section 1)) is marked with a blue triangle.

The information in this safety data sheet applies only to this specific product (mentioned in section 1) and is not necessarily correct for use with other chemicals/products.

It is recommended to hand over this safety data sheet to the actual user of the product. Information in this safety data sheet cannot be used as a product specification.

Country-language: US-en