According to EC-Regulation 2015/830



SAFETY DATA SHEET

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Trade name

993 - Hardener for wheel clear coat

Product no.

993 REACH registration number

Not applicable

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

Relevant identified uses of the substance or mixture Topcoat finishing

Uses advised against

The full text of any mentioned and identified use categories are given in section 16

1.3. Details of the supplier of the safety data sheet

Company and address

HBC System Smarttool Production ApS Hobrovej 961-963 9530 Stövring Denmark tel:+45 70 22 70 70 Contact person Vibeke Jørgensen E-mail

info@hbc-system.com

SDS date

2018-06-08

SDS Version

1.0

1.4. Emergency telephone number

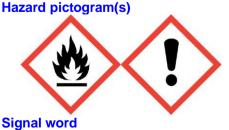
Contact The National Poisons Information Service (dial 111, 24 h service). See section 4 "First aid measures".

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Flam. Liq. 3; H226 Aerosol 3; H229 STOT SE 3; H336 See full text of H-phrases in section 2.2.

2.2. Label elements



Warning Hazard statement(s) Flammable liquid and vapour. (H226)



Pressurised container: May burst if heated. (H229) May cause drowsiness or dizziness. (H336)

| Safety statement(s) | | |
|--|---|--|
| General | | |
| Prevention | Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. (P210). | |
| | Do not pierce or burn, even after use. (P251). | |
| Response | Call a POISON CENTER/doctor if you feel unwell. (P312). | |
| · | In case of fire: Use alcohol-resistant foam/carbonic acid/powder/water mist/carbon dioxide/dry sand to extinguish. (P370+P378). | |
| Storage | Protect from sunlight. Do no expose to temperatures exceeding 50 °C/122°F. | |
| C C | (P410+P412). | |
| Disposal | Dispose of contents/container to an approved waste disposal plant. (P501). | |
| Identity of the substances primarily responsible for the major health hereards | | |

Identity of the substances primarily responsible for the major health hazards

n-butyl acetate

2.3. Other hazards

This product contains an organic solvent. Repeated or prolonged exposure to organic solvents may result in adverse effects to the nervous system and internal organs such as liver and kidneys.

Additional labelling

Repeated exposure may cause skin dryness or cracking. (EUH066)

Additional warnings

Not applicable

VOC

Not applicable

SECTION 3: Composition/information on ingredients

3.1/3.2. Substances/Mixtures

| NAME: IDENTIFICATION NOS.: CONTENT: CLP CLASSIFICATION: | Aliphatic Polyisocyanate CAS-no: 28182-81-2 40-60% NA |
|--|---|
| NAME: | n-butyl acetate |
| IDENTIFICATION NOS .: | CAS-no: 123-86-4 EC-no: 204-658-1 REACH-no: 01-2119485493-29 Index-no: 607-025-00-1 |
| CONTENT: | 25-40% |
| CLP CLASSIFICATION: | Flam, Lig. 3, STOT SE 3 |
| | H226, H336, EUH066 |
| NOTE: | S |
| | |

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

S = Organic solvent Other information

SECTION 4: First aid measures

4.1. Description of first aid measures

General information

In the case of accident: Contact a doctor or casualty department – take the label or this safety data sheet. The doctor can contact The National Poisons Information Service (dial 111, 24 h service). 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

Bring the person into fresh air and stay with him/her.

Skin contact

Remove contaminated clothing and shoes immediately. Ensure to wash exposed skin thoroughly with soap and water. Skin cleanser can be used. DO NOT use solvents or thinners.

Eye contact



Remove contact lenses. Flush eyes immediately with plenty of water or isotonic water (20-30°C) for at least 15 minutes and continue until irritation stops. Make sure to flush under the upper and lower eyelids. If irritation continues, contact a doctor. Continue flushing during transport.

Ingestion

Provide plenty of water for the person to drink and stay with him/her. 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 victim lean forward with head down to avoid inhalation of- or choking on vomited material.

Burns

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

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

Neurotoxic effects: This product contains organic solvents, which may cause adverse effects to the nervous system. Symptoms of neurotoxicity include: loss of appetite, headache, dizziness, ringing in ears, tingling sensations of skin, sensitivity to the cold, cramps, difficulty in concentrating, tiredness, etc. Repeated exposure to solvents can result in the breaking down of the skin's natural fat layer and may result in an increased absorption potential of other hazardous substances at the area of exposure.

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.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Recommended: alcohol-resistant foam, carbonic acid, powder, water mist. Waterjets should not be used, since they can spread the fire.

5.2. Special hazards arising from the substance or mixture

If the product is exposed to high temperatures, e.g. in the event of fire, dangerous catabolic substances are produced. These are: Carbon oxides. Fire will result in dense black smoke. Exposure to combustion products may harm your health. Fire fighters should wear appropriate protection equipment. 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.

5.3. Advice for firefighters

Wear self-contained breathing apparatus and protective clothing to prevent contact. Upon direct exposure contact The National Poisons Information Service (dial 111, 24 h service) in order to obtain further advice.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Avoid inhalation of vapours from spilled material. Storages not yet ignited must be cooled by water mist. Remove flammable materials if conditions allow it. Ensure sufficient ventilation.

6.2. Environmental precautions

No specific requirements.

6.3. Methods and material for containment and cleaning up

Use sand, sawdust, earth, vermiculite, diatomaceous earth to contain and collect non-combustible absorbent materials and place in container for disposal, according to local regulations. To the extent possible cleaning is performed with normal cleaning agents. Avoid use of solvents.

6.4. Reference to other sections

See section on "Disposal considerations" in regard of handling of waste. See section on 'Exposure controls/personal protection' for protective measures.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Smoking, storage of tobacco, consumption and storage of food or liquids are not allowed in the workrooms. See section on 'Exposure controls/personal protection' for information on personal protection.

7.2. Conditions for safe storage, including any incompatibilities

Always store in containers of the same material as the original container. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Must be stored in a cool and well-ventilated area, away from possible sources of ignition.



Storage temperature

Refrigerator, 2 to 8°C

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

OEL

n-butyl acetate Long-term exposure limit (8-hour TWA reference period): 150 ppm | 724 mg/m³ Short-term exposure limit (15-minute reference period): 200 ppm | 966 mg/m³

DNEL / PNEC DNEL (n-butyl acetate): 102,34 mg/m3 Exposure: Inhalation Duration of Exposure: Long term – Systemic effects - General population

DNEL (n-butyl acetate): 960 mg/m3 Exposure: Inhalation Duration of Exposure: Short term – Local effects - Workers

DNEL (n-butyl acetate): 960 mg/m3 Exposure: Inhalation Duration of Exposure: Short term – Systemic effects - Workers

DNEL (n-butyl acetate): 480 mg/m3 Exposure: Inhalation Duration of Exposure: Long term – Systemic effects - Workers

DNEL (n-butyl acetate): 480 mg/m3 Exposure: Inhalation Duration of Exposure: Long term – Local effects - Workers

DNEL (n-butyl acetate): 859,7 mg/m3 Exposure: Inhalation Duration of Exposure: Short term – Systemic effects - General population

DNEL (n-butyl acetate): 102,34 mg/m3 Exposure: Inhalation Duration of Exposure: Long term – Local effects - General population

DNEL (n-butyl acetate): 859,7 mg/m3 Exposure: Inhalation Duration of Exposure: Short term – Local effects - General population

PNEC (n-butyl acetate): 35,6 mg/L Exposure: Sewage Treatment Plant

PNEC (n-butyl acetate): 0,18 mg/L Exposure: Freshwater

PNEC (n-butyl acetate): 0,018 mg/L Exposure: Marine water

PNEC (n-butyl acetate): 0,36 mg/L Exposure: Intermittent release

PNEC (n-butyl acetate): 0,981 mg/kg Exposure: Freshwater sediment

PNEC (n-butyl acetate): 0,0981 mg/kg Exposure: Marine water sediment

PNEC (n-butyl acetate): 0,09903 mg/kg Exposure: Soil

8.2. Exposure controls

Compliance with the accepted occupational exposure limits values should be controlled on a regular basis. General recommendations

Observe general occupational hygiene standards.

Exposure scenarios



In the event exposure scenarios are appended to the safety data sheet, the operational conditions and risk management measures in these shall be complied with.

Exposure limits

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

Appropriate technical measures

Airborne gas and dust concentrations must be kept at a minimum and below current limit values (see above). Installation of an exhaust system if normal air flow in the work room is not sufficient is recommended. Ensure emergency eyewash and -showers are clearly marked.

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

Use only CE marked protective equipment. Respiratory Equipment

NA

Skin protection

Wear appropriate protection clothing, e.g. coveralls in polypropylene approved type 6 and Category III. Hand protection

Recommended: Natural rubber (latex)

Eye protection

Wear safety glasses with side shields.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

| Form | Liquid | |
|---|--------------------|--|
| Colour | Colourless | |
| Odour | Characteristic | |
| Odour threshold (ppm) | No data available. | |
| pH | No data available. | |
| Viscosity (40°C) | No data available. | |
| Density (g/cm ³) | No data available. | |
| Phase changes | | |
| Melting point (°C) | No data available. | |
| Boiling point (°C) | 24 | |
| Vapour pressure | No data available. | |
| Decomposition temperature (°C) | No data available. | |
| Evaporation rate (n-butylacetate = 100) | No data available. | |
| Data on fire and explosion hazards | | |
| Flash point (°C) | 89 | |
| Ignition (°C) | No data available. | |
| Auto flammability (°C) | No data available. | |
| Explosion limits (% v/v) | No data available. | |
| Explosive properties | No data available. | |
| Solubility | | |
| Solubility in water | Insoluble | |
| n-octanol/water coefficient | No data available. | |
| 9.2. Other information | | |
| Solubility in fat (g/L) | No data available. | |
| | | |



SECTION 10: Stability and reactivity

| 10.1 . | Reactivity |
|---------------|---|
| | No data available |
| 10.2 | Chemical stability |
| | The product is stable under the conditions, noted in the section "Handling and storage". |
| 10.3 | Possibility of hazardous reactions |
| | Nothing special |
| 10.4 | Conditions to avoid |
| | Avoid static electricity. Do not expose to any forms of heat (e.g. solar radiation). May lead to excess |
| | pressure. |
| 10.5 | Incompatible materials |
| | Strong acids, strong bases, strong oxidizing agents, and strong reducing 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

Substance: n-butyl acetate Species: Rat Test: LD50 Route of exposure: Oral Result: 10768 g/kg

Substance: n-butyl acetate Species: Rabbit Test: LD50 Route of exposure: Skin Result: > 5000 mg/kg

Substance: n-butyl acetate Species: Rat Test: LD50 Route of exposure: Oral Result: > 6400 mg/kg

Substance: n-butyl acetate Species: Rat Test: LC50 Route of exposure: Inhalation Result: 2000 ppm

Substance: n-butyl acetate Species: Rat Test: LC50 Route of exposure: Inhalation Result: 21.1 mg/l/4h

Skin corrosion/irritation

No data available. Serious eye damage/irritation No data available. **Respiratory or skin sensitisation** No data available. Germ cell mutagenicity No data available. Carcinogenicity No data available. **Reproductive toxicity** No data available. STOT-single exposure May cause drowsiness or dizziness. **STOT-repeated exposure** No data available. Aspiration hazard



No data available.

Long term effects

Neurotoxic effects: This product contains organic solvents, which may cause adverse effects to the nervous system. Symptoms of neurotoxicity include: loss of appetite, headache, dizziness, ringing in ears, tingling sensations of skin, sensitivity to the cold, cramps, difficulty in concentrating, tiredness, etc. Repeated exposure to solvents can result in the breaking down of the skin's natural fat layer and may result in an increased absorption potential of other hazardous substances at the area of exposure.

SECTION 12: Ecological information

12.1. Toxicity

Substance: n-butyl acetate Species: Daphnia Test: EC50 Duration: 24 H Result: 205 mg/L

Substance: n-butyl acetate Species: Fish Test: LC50 Duration: 96 H Result: 100 mg/L

Substance: n-butyl acetate Species: Crustacean Test: LC50 Duration: 48 h Result: 32000 ug/L

12.2. Persistence and degradability

Substance Biodegradability n-butyl acetate Yes Test No data available Result No data available

12.3. Bioaccumulative potential

| Substance | Potential bioaccumulation | Log | |
|-----------------|---------------------------|------|--|
| n-butyl acetate | No | 1,78 | |

gPow ^B BCF No data available

12.4. Mobility in soil

n-butyl acetate: Log Koc= 1,487982, Calculated from LogPow (High mobility potential.).

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

Nothing special

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Product is covered by the regulations on hazardous waste.

Waste

EWC code

Specific labelling

Contaminated packing

Contaminated packaging must be disposed of similarly to the product.

1139

SECTION 14: Transport information

14.1 – 14.4

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

ADR/RID

14.1. UN number

| 14.2. UN proper shipping name | COATING SOLUTION (includes surface treatments or coatings used for industrial or other purposes such as vehicle undercoating, drum or barrel lining) |
|-------------------------------|--|
| 14.3. Transport hazard | 3 |

According to EC-Regulation 2015/830



| class(es) | |
|-------------------------|---|
| 14.4. Packing group | 11 |
| Notes | - |
| Tunnel restriction code | - |
| IMDG | |
| UN-no. | 1139 |
| Proper Shipping Name | COATING SOLUTION (includes surface treatments or coatings used for industrial or other purposes such as vehicle undercoating, drum or barrel lining) |
| Class | 3 |
| PG* | ll |
| EmS | - |
| MP** | - |
| Hazardous constituent | - |
| ΙΑΤΑ/ΙCΑΟ | |
| UN-no. | 1139 |
| Proper Shipping Name | COATING SOLUTION (includes surface treatments or coatings used for industrial or other purposes such as vehicle undercoating, drum or barrel lining) |
| Class | 3 |
| PG* | II |

14.5. Environmental hazards

14.6. Special precautions for user

14.7. Transport in bulk according to Annex II of Marpol and the IBC Code No data available

(*) Packing group (**) Marine pollutant

SECTION 15: Regulatory information

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

Restrictions for application

People under the age of 18 shall not be exposed to this product cf. Council Directive 94/33/EC of 22 June 1994 on the protection of young people at work.

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. **Demands for specific education**

Additional information

Not applicable

Seveso

Seveso III Part 1: P5c

Sources

Council Directive 94/33/EC of 22 June 1994 on the protection of young people at work.

Council Directive 75/324/EEC of 20 May 1975 on the approximation of the laws of the Member States relating to aerosol dispensers.

The Control of Substances Hazardous to Health Regulations 2002. SI 2002/2677. The Stationery Office, 2002.

Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006 (CLP). EC regulation 1907/2006 (REACH).

The Control of Major Accident Hazards (COMAH) Regulations 2015.

15.2. Chemical safety assessment

No



SECTION 16: Other information

Full text of H-phrases as mentioned in section 3

H226 - Flammable liquid and vapour.

H336 - May cause drowsiness or dizziness.

EUH066 - Repeated exposure may cause skin dryness or cracking.

The full text of identified uses as mentioned in section 1

Additional label elements



Other

In accordance with Regulation (EC) No. 1272/2008 (CLP) the evaluation of the classification of the mixture is based on:

The classification of the mixture in regard of physical hazards has been based on experimental data. The classification of the mixture in regard of health hazards are in accordance with the calculation methods given by Regulation (EC) No. 1272/2008 (CLP)

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.

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.

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

The safety data sheet is validated by

Admin Date of last essential change (First cipher in SDS version)

Date of last minor change (Last cipher in SDS version)

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