

SAFETY DATA SHEET

Conforms to Regulation (EC) No. 1907/2006 (REACH), Annex II, as amended by Commission Regulation (EU) 2015/830 - Netherlands

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

| 1.1 Product identifier | |
|---------------------------------|----------------------------|
| Product name | : TVL2PO:TVL 2 ORANGE:AV02 |
| Product code | : TVL2PO |
| Trade name | : STREAMLINE® - GBL FREE |
| Date of issue/ Date of revision | : 23 May 2022 |
| Version | : 0.01 |
| | |

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

| Identified uses | | | |
|---|--------|--|--|
| Printing ink; Printing ink related material; Colorant | | | |
| Uses advised against | Reason | | |
| Not applicable. | | | |

1.3 Details of the supplier of the safety data sheet

| Manufacturer/ Distributor | : SUNJET NORTON HILL MIDSOMER NORTON BATH SOMERSET BA3 4RT UNITED KINGDOM (44) 1761 414471 |
|---------------------------|--|
| e-mail address of person | SUN CHEMICAL O+R RECHTE TOCHT 2 1507 BZ ZAANDAM POSTBUS 227 1500 EE ZAANDAM HOLLAND (31) 75 6555453 : regulatory.affairs@sunchemical.com |
| responsible for this SDS | : regulatory.analis@sunchemical.com |

1.4 Emergency telephone number

| National advisory body/Poison Center | | | | | | | |
|--------------------------------------|---|--|--|--|--|--|--|
| Telephone number | : Nationaal Vergiftigingen Informatie Centrum : +31 (0) 88 755 8000 (Uitsluitend bestemd om artsen te informeren bij accidentele vergiftigingen) | | | | | | |
| <u>Supplier</u> | | | | | | | |
| Telephone number | : (31) 858880596 (Chemtrec - 24 hours) | | | | | | |

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Product definition : Mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]

Not classified.

See Section 11 for more detailed information on health effects and symptoms.

| 2.2 Label elements | | |
|---|---|---|
| Signal word | : | No signal word. |
| Hazard statements | : | No known significant effects or critical hazards. |
| Precautionary statements | | |
| Prevention | : | Not applicable. |
| Response | : | Not applicable. |
| Storage | : | Not applicable. |
| Disposal | : | Not applicable. |
| Supplemental label elements | : | Safety data sheet available on request. |
| Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles | : | Not applicable. |
| 2.3 Other hazards | | |
| Other hazards which do | : | None known. |

not result in classification

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SECTION 3: Composition/information on ingredients

| | | | Classification | |
|-------------------------|--|--------|--|------|
| Product/ingredient name | Identifiers | % | Regulation (EC) No. 1272/2008 [CLP] | Туре |
| propylene carbonate | REACH #: 01-2119537232-48 EC: 203-572-1 CAS: 108-32-7 Index: 607-194-00-1 | 5 < 10 | Eye Irrit. 2, H319 | [1] |
| | | | See Section 16 for the full text of the H statements declared above. | |

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment, are PBTs or vPvBs or have been assigned a workplace exposure limit and hence require reporting in this section.

Туре

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SECTION 3: Composition/information on ingredients

[1] Substance classified with a health or environmental hazard

[2] Substance with a workplace exposure limit

- [3] Substance meets the criteria for PBT according to Regulation (EC) No. 1907/2006, Annex XIII
- [4] Substance meets the criteria for vPvB according to Regulation (EC) No. 1907/2006, Annex XIII

[5] Substance of equivalent concern

[6] Additional disclosure due to company policy

Occupational exposure limits, if available, are listed in Section 8.

SECTION 4: First aid measures

4.1 Description of first aid measures General : In all cases of doubt, or when symptoms persist, seek medical attention. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and seek medical advice. : Remove contact lenses, if present and easy to do. Immediately flush eyes with Eye contact running water for at least 15 minutes, keeping eyelids open. Inhalation Remove to fresh air. Keep person warm and at rest. If not breathing, if breathing is : irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. Skin contact : Remove contaminated clothing and shoes. Wash skin thoroughly with soap and water or use recognized skin cleanser. Do NOT use solvents or thinners. Ingestion : If swallowed, seek medical advice immediately and show this container or label. Keep person warm and at rest. Do not induce vomiting. Protection of first-aiders : No action shall be taken involving any personal risk or without suitable training.

4.2 Most important symptoms and effects, both acute and delayed

There are no data available on the mixture itself. Procedure used to derive the classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]. See Sections 2 and 3 for details.

Exposure to component solvent vapor concentrations in excess of the stated occupational exposure limit may result in adverse health effects such as mucous membrane and respiratory system irritation and adverse effects on the kidneys, liver and central nervous system. Symptoms and signs include headache, dizziness, fatigue, muscular weakness, drowsiness and, in extreme cases, loss of consciousness.

Solvents may cause some of the above effects by absorption through the skin. Repeated or prolonged contact with the mixture may cause removal of natural fat from the skin, resulting in non-allergic contact dermatitis and absorption through the skin.

If splashed in the eyes, the liquid may cause irritation and reversible damage.

Ingestion may cause nausea, diarrhea and vomiting.

This takes into account, where known, delayed and immediate effects and also chronic effects of components from short-term and long-term exposure by oral, inhalation and dermal routes of exposure and eye contact.

4.3 Indication of any immediate medical attention and special treatment needed

Notes to medical doctor : In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.

Specific treatments

: No specific treatment.

SECTION 5: Firefighting measures

| 5.1 Extinguishing media | |
|---|--|
| Suitable extinguishing media | : Use dry chemical, CO ₂ , water spray (fog) or foam. |
| Unsuitable extinguishing media | : Do not use water jet. |
| 5.2 Special hazards arising fr | om the substance or mixture |
| Hazards from the substance or mixture | : In a fire or if heated, a pressure increase will occur and the container may burst. |
| Hazardous thermal decomposition products | : Decomposition products may include the following materials: carbon dioxide carbon monoxide nitrogen oxides halogenated compounds |
| 5.3 Advice for firefighters | |
| Special protective actions for fire-fighters | : Cool closed containers exposed to fire with water. Do not release runoff from fire to drains or watercourses. |
| Special protective equipment for fire-fighters | : Appropriate breathing apparatus may be required. |

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

| en i electia precadicióne, pre | are equi | procedures |
|---|-------------------------|--|
| For non-emergency personnel | | ources of ignition and ventilate the area. Avoid breathing vapor or mist. rotective measures listed in sections 7 and 8. |
| For emergency responders | informatio | zed clothing is required to deal with the spillage, take note of any in in Section 8 on suitable and unsuitable materials. See also the in in "For non-emergency personnel". |
| 6.2 Environmental precautions | | ow to enter drains or watercourses. If the product contaminates lakes, sewers, inform the appropriate authorities in accordance with local s. |
| 6.3 Methods and materials for containment and cleaning up | earth, ver according | nd collect spillage with non-combustible, absorbent material e.g. sand, miculite or diatomaceous earth and place in container for disposal to local regulations (see Section 13). Preferably clean with a detergent. ng solvents. |
| 6.4 Reference to other sections | See Secti | on 1 for emergency contact information. on 8 for information on appropriate personal protective equipment. on 13 for additional waste treatment information. |

SECTION 7: Handling and storage

| 7.1 Precautions for safe handling | |
|--------------------------------------|--|
| Protective measures | Keep container tightly closed. Avoid contact with skin and eyes. Always keep in containers made from the same material as the original one. Avoid inhalation of vapor, spray or mist. Put on appropriate personal protective equipment (see Section 8). Never use pressure to empty. Container is not a pressure vessel. Comply with the health and safety at work laws. |

SECTION 7: Handling and storage

| Advice on general occupational hygiene | : Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures. |
|--|--|
| 7.2 Conditions for safe storage, including any incompatibilities | : Store between the following temperatures: 5 – 35 °C. Store in accordance with local regulations. Store in a dry, cool and well-ventilated area. Keep away from heat and direct sunlight. Keep container tightly closed. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Use appropriate containment to avoid environmental contamination. Do not reuse container. See Section 10 for incompatible materials before handling or use. |
| 7.3 Specific end use(s) | |
| Recommendations | For the relevant identified use(s) listed in Section 1 the advice mentioned in this section 7 is to be observed. |
| Industrial sector specific solutions | : Not available. |

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Occupational exposure limits

No exposure limit value known.

Recommended monitoring procedures : If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment. Reference should be made to monitoring standards, such as the following: European Standard EN 689 (Workplace atmospheres - Guidance for the assessment of exposure by inhalation to chemical agents for comparison with limit values and measurement strategy) European Standard EN 14042 (Workplace atmospheres - Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents) European Standard EN 482 (Workplace atmospheres - General requirements for the performance of procedures for the measurement of chemical agents) Reference to national guidance documents for methods for the determination of hazardous substances will also be required.

DNELs

| Product/ ingredient name | Туре | Exposure | Value | Population | Effects |
|-----------------------------|------|--|-----------------------------|--------------------|-------------------|
| 1 1 5 | | Long term Inhalation Long term Dermal | 20 mg/m³ 50 mg/kg bw/day | Workers Workers | Local Systemic |

PNECs

| Product/ingredient name | Туре | Compartment Detail | Value | Method Detail |
|-------------------------|------|-----------------------|-----------------|---------------|
| propylene carbonate | - | Fresh water | 0.9 mg/l | - |
| | - | Marine water | 0.09 mg/l | - |
| | - | Fresh water sediment | 0.83 mg/kg dwt | - |
| | - | Marine water sediment | 0.083 mg/kg dwt | - |
| | - | Soil | 0.81 mg/kg dwt | - |
| | - | Sewage Treatment | 7400 mg/l | - |
| | | Plant | | |

8.2 Exposure controls

SECTION 8: Exposure controls/personal protection

| • | |
|----------------------------------|--|
| Appropriate engineering controls | : Provide adequate ventilation. Where reasonably practicable, this should be achieved by the use of local exhaust ventilation and good general extraction. If these are not sufficient to maintain concentrations of particulates and solvent vapors below the OEL, suitable respiratory protection must be worn. |
| Individual protection measured | <u>ures</u> |
| Hygiene measures | : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. |
| Eye/face protection | : Use safety eyewear designed to protect against splash of liquids. Use eye protection according to EN 166. |
| Skin protection | |
| Hand protection | : Wear suitable gloves tested to EN374. There is no one glove material or combination of materials that will give unlimited resistance to any individual or combination of chemicals. |
| Gloves | : Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. |
| | Barrier creams may help to protect the exposed areas of the skin but should not be applied once exposure has occurred. |
| Body protection | Personnel should wear antistatic clothing made of natural fibers or of high- temperature-resistant synthetic fibers. |
| Respiratory protection | : In case of inadequate ventilation wear respiratory protection. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator. Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. |
| Environmental exposure controls | : Do not allow to enter drains or watercourses. |

SECTION 9: Physical and chemical properties

| 9.1 Information on basic physica | l a | nd chemical properties |
|--|-----|--|
| Physical state | : | Liquid. |
| Color | : | Orange. |
| Odor | : | Characteristic. |
| Odor threshold | : | Not applicable. |
| Melting point/freezing point | : | Not applicable. |
| Flash point | : | 60 to 93.3°C |
| VOC | : | 10% |
| рН | : | Not tested |
| Explosion limits | : | Lower: 2.3% |
| Boiling point | : | Lowest known value: 242°C (468°F) |
| Evaporation rate | : | < 0.005 (Carbonate Compound) compared with butyl acetate |
| Vapor pressure | : | Not tested |
| Vapor density | : | Not tested |
| Relative density | : | Not tested |
| Solubility(ies) | : | Not tested |
| Partition coefficient: n-octanol/ water | : | Not applicable. |

TVL2PO

SECTION 9: Physical and chemical properties

| Auto-ignition temperature | : Not applicable. |
|---------------------------|-------------------|
| Decomposition temperature | : Not applicable. |
| Viscosity | : Not tested |
| Explosive properties | : Not applicable. |
| Oxidizing properties | : Not applicable. |

9.2 Other information

No additional information.

| SECTION 10: Stability and reactivity | | | | |
|--|---|---------|--|--|
| 10.1 Reactivity | No specific test data related to reactivity available for this product or its ingred | dients. | | |
| 10.2 Chemical stability | Stable under recommended storage and handling conditions (see Section 7). | | | |
| 10.3 Possibility of hazardous reactions | Jnder normal conditions of storage and use, hazardous reactions will not occ | cur. | | |
| 10.4 Conditions to avoid | When exposed to high temperatures may produce hazardous decomposition products. | I | | |
| 10.5 Incompatible materials | Keep away from the following materials to prevent strong exothermic reaction oxidizing agents, strong alkalis, strong acids. | ns: | | |
| 10.6 Hazardous decomposition products | Jnder normal conditions of storage and use, hazardous decomposition produ should not be produced. | ucts | | |

SECTION 11: Toxicological information

There are no data available on the mixture itself. Procedure used to derive the classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]. See Sections 2 and 3 for details.

Exposure to component solvent vapor concentrations in excess of the stated occupational exposure limit may result in adverse health effects such as mucous membrane and respiratory system irritation and adverse effects on the kidneys, liver and central nervous system. Symptoms and signs include headache, dizziness, fatigue, muscular weakness, drowsiness and, in extreme cases, loss of consciousness.

Solvents may cause some of the above effects by absorption through the skin. Repeated or prolonged contact with the mixture may cause removal of natural fat from the skin, resulting in non-allergic contact dermatitis and absorption through the skin.

If splashed in the eyes, the liquid may cause irritation and reversible damage.

Ingestion may cause nausea, diarrhea and vomiting.

This takes into account, where known, delayed and immediate effects and also chronic effects of components from short-term and long-term exposure by oral, inhalation and dermal routes of exposure and eye contact.

11.1 Information on toxicological effects

Acute toxicity

| Product/ingredient name | Result | Species | Dose | Exposure |
|-------------------------|--------------------------|---------------|----------------------------|----------|
| 1 1. 2 | LD50 Dermal LD50 Oral | Rabbit Rat | >2000 mg/kg >5000 mg/kg | - |

Classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]

Irritation/Corrosion

| Date of issue : 23 | May 2022 |
|--------------------|----------|
|--------------------|----------|

SECTION 11: Toxicological information

The product has not been tested.

Classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]

Sensitization

The product has not been tested.

Classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]

Mutagenicity

The product has not been tested.

Classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]

Carcinogenicity

The product has not been tested.

Classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]

Reproductive toxicity

The product has not been tested.

Classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]

Teratogenicity

The product has not been tested.

Classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]

Specific target organ toxicity (single exposure)

Not determined - Classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]

Specific target organ toxicity (repeated exposure)

Not determined - Classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]

Aspiration hazard

Not determined - Classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]

SECTION 12: Ecological information

There are no data available on the mixture itself. Do not allow to enter drains or watercourses.

The product is not classified as hazardous according to Regulation (EC) 1272/2008 as amended.

12.1 Toxicity

The product has not been tested.

Classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]

12.2 Persistence and degradability

The product has not been tested.

Classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]

12.3 Bioaccumulative potential

| Product/ingredient name | LogPow | BCF | Potential |
|-------------------------|--------|-----|-----------|
| propylene carbonate | -0.41 | - | low |

Date of issue : 23 May 2022

SECTION 12: Ecological information

| 12.4 Mobility in soil | |
|--|---|
| Soil/water partition coefficient (Koc) | : Not available. |
| Mobility | : Not available. |
| 12.5 Results of PBT and vPv | /B assessment |
| РВТ | The product does not contain a substance fulfilling the PBT (persistent/ bioaccumulative/toxic) criteria. |
| vPvB | : The product does not contain a substance fulfilling the vPvB criteria (very persistent/ very bioaccumulative) |
| 12.6 Other adverse effects | : No known significant effects or critical hazards. |

SECTION 13: Disposal considerations

Do not allow to enter drains or watercourses.

Dispose of according to all federal, state and local applicable regulations.

If this product is mixed with other wastes, the original waste product code may no longer apply and the appropriate code should be assigned.

For further information, contact your local waste authority.

13.1 Waste treatment methods

| <u>Product</u> | |
|------------------------------------|--|
| Methods of disposal | : The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non- recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. |
| Packaging | |
| Methods of disposal | : The generation of waste should be avoided or minimized wherever possible. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. |
| European Waste Catalogue (EWC): | : 08 03 12 waste ink containing hazardous substances |
| Special precautions | : This material and its container must be disposed of in a safe way. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. |

SECTION 14: Transport information

| | ADR/RID | ADN | IMDG | ΙΑΤΑ |
|-----------------------|---------|--------|--------|------------|
| 14.1 UN number | UN3082 | UN3082 | UN3082 | UN3082 |
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| Date of issue : 23 Ma | ay 2022 | | | Page: 9/11 |

TVL2PO SECTION 14: Transport information 14.2 UN proper **ENVIRONMENTALLY** ENVIRONMENTALLY ENVIRONMENTALLY ENVIRONMENTALLY shipping name HAZARDOUS HAZARDOUS HAZARDOUS HAZARDOUS SUBSTANCE, SUBSTANCE, SUBSTANCE, SUBSTANCE, LIQUID, N.O.S. LIQUID, N.O.S. LIQUID, N.O.S. LIQUID, N.O.S. (Benzonitrile, 3,3'-(2,3, (Benzonitrile, 3,3'-(2,3, (Benzonitrile, 3,3'-(2,3, (Benzonitrile, 3,3'-(2,3, 5,6-tetrahydro-3, 5,6-tetrahydro-3, 5,6-tetrahydro-3, 5,6-tetrahydro-3, 6-dioxopyrrolo[3,4-c] 6-dioxopyrrolo[3,4-c] 6-dioxopyrrolo[3,4-c] 6-dioxopyrrolo[3,4-c] pyrrole-1,4-diyl)bis-) pyrrole-1,4-diyl)bis-) pyrrole-1,4-diyl)bis-) pyrrole-1,4-diyl)bis-) 9 9 14.3 Transport 9 9 hazard class(es) **AIN** 14.4 Packing Ш ш ш ш group 14.5 Yes. Yes. Yes. Yes. Environmental hazards Additional The product is only information regulated as a dangerous good when transported in tank vessels. 14.6 Special Transport within user's premises: always transport in closed containers that are upright and precautions for secure. Ensure that persons transporting the product know what to do in the event of an

user accident or spillage.

14.7 Transport in bulk: Not available.according to Annex II ofMARPOL and the IBC Code

SECTION 15: Regulatory information

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

EU Regulation (EC) No. 1907/2006 (REACH)

Annex XIV - List of substances subject to authorization

Substances of very high concern

None of the components are listed.

Annex XVII - Restrictions : Not applicable.

on the manufacture, placing on the market

and use of certain

dangerous substances, mixtures and articles

Other EU regulations National regulations

TVL2PO

SECTION 15: Regulatory information

| - | - |
|------------------------------------|---|
| Industrial use | The information contained in this safety data sheet does not constitute the user's own assessment of workplace risks, as required by other health and safety legislation. The provisions of the national health and safety at work regulations apply to the use of this product at work. |
| Water Discharge Policy (ABM) | : A(2) Toxic for aquatic organisms, may have long-term hazardous effects in aquatic environment. Decontamination effort: A |
| 15.2 Chemical Safety Assessment | : No Chemical Safety Assessment has been carried out. |

SECTION 16: Other information

| CEPE code | : 1 | | |
|--|---|--|--|
| Indicates information that has changed from previously issued version. | | | |
| Abbreviations and | : ATE = Acute Toxicity Estimate | | |
| acronyms | CLP = Classification, Labelling and Packaging Regulation [Regulation (EC) No. | | |
| | 1272/2008] | | |
| | DNEL = Derived No Effect Level | | |
| | EUH statement = CLP-specific Hazard statement | | |
| | PNEC = Predicted No Effect Concentration | | |
| | RRN = REACH Registration Number | | |

Procedure used to derive the classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]

| Classification | | Justification |
|--|--------------------------|---|
| Not classified. | | |
| Full text of abbreviated H statements | : H319 Causes serious | eye irritation. |
| Full text of classifications [CLP/GHS] | : Eye Irrit. 2, H319 | SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 2 |
| Date of printing | : 14 September 2022 | |
| Date of previous issue | : No previous validation | |
| Nation to reader | | |

Notice to reader

The information in this SDS is based on the present state of our knowledge and on current laws. The product is not to be used for purposes other than those specified under section 1 without first obtaining written handling instructions. It is always the responsibility of the user to take all necessary steps to fulfill the demands set out in the local rules and legislation. The information in this SDS is meant to be a description of the safety requirements for our product. It is not to be considered a guarantee of the product's properties.