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MATERIAL SAFETY DATA SHEET

Updated 02.10.21

Page 1 of 6

IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND COMPANY

Product Name: PROGRAPH PE-V-MIX

Company: PROTECTOLOGY LTD

5, PASSAGE STREET

FOWEY PL23 1DE

CONTACT NUMBER: +44 (01726) 832694

2. COMPOSITION/INFORMATION ON INGREDIENTS

Code Number: PRO 200

Description: Spray Thinner

Chemical Family: Mixture of surfactants and solvents

REACH No.: A registration number is not available for this product as the ink or

its uses are exempted from registration, the annual tonnage does not require a registration or the registration is envisaged for a later

registration deadline.

Hazardous Components:

| CAS | Name | Amount |
|----------|---------------|--------|
| 123-86-4 | Butyl acetate | 90-95% |
| | | |

HAZARDS IDENTIFICATION

3.1 Classification of the mixture

Classification according to Regulation (EC) No 1272/2008

Flammable Liquids (Category 3), H226

Specific target organ toxicity – single exposure (Category 3), central nervous system, H336

<u>3.2 Label Elements:</u>

Labelling according Regulation (EC) No 1272/2008

Pictogram

3.



Signal Word Warning

Hazard statement(s)

H226 Flammable liquid and vapourH336 May cause drowsiness or dizziness.

Precautionary statement(s)

P210 Keep away from heat, hot surfaces, sparks, open flames

and other ignition sources. No smoking.

P370 + P378 In case of fire: Use dry powder or dry sand to extinguish.

Supplemental Hazard Statements None

3.3 Other Hazards:

The mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

FIRST AID MEASURES

4.1: Description of first aid measures

General advice Consult a physician. Show this safety data sheet to the doctor in

attendance.

Inhalation: Move to fresh air. If rapid recovery does not occur, obtain medical

attention.

Skin: Wash skin with hand cleanser. Obtain medical advice if irritation

persists.

Eyes: Flush eye with water including under eyelids for at least 15

minutes. If persistent irritation occurs, obtain medical attention.

Ingestion: Do not induce vomiting. Do not delay. Give water to drink

providing patient is conscious. Seek medical advice immediately.

4.2 Most important symptoms and effects, both acute and delayed

The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11.

4.3 Indication of any immediate medical attention and special treatment needed

No data available

FIRE FIGHTING MEASURES

5.1. Extinguishing media

Suitable extinguishing media

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

5.2 Special hazards arising from the mixture

Carbon oxides

5.3. Advice for firefighters

Wear self-contained breathing apparatus for firefighting if necessary.

5.4. Further Information

No data available

Page 2 of 6

| 6. ACCIDENTAL RELEASE MEASURES | | |
|--------------------------------|---|--|
| 6.1 Personal Precautions: | Wear appropriate protective clothing. Avoid contact with skin, eyes and clothing. Ventilate contaminated areas thoroughly. Eliminate all sources of ignition. Avoid breathing vapours, mist or gas. | |
| 6.2 Environmental Precautions: | Do not let product enter drains. | |
| 6.3 Spillages: | Contain and absorb using earth, sand or other inert material. Transfer into suitable containers for recovery or disposal. Finally flush with plenty of water. | |

| 7. | HANDLING AND STORAGE |
|-----------|--|
| Handling: | Avoid inhalation of vapour or mist. |
| | Keep away from sources of ignition - No smoking. Take measures to prevent the build up of electrostatic charge. |
| | For precautions see section 2.2. |
| Storage: | Storage area should be cool and well ventilated. Store away from sources of heat or ignition. Keep container tightly closed. |

EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control Parameters:

| Component | CAS-No. | ValueForm of exposure | Control parameters | Basis |
|-----------------|----------|-----------------------|----------------------|---|
| n-Butyl acetate | 123-86-4 | STEL | 200 ppm 966 mg/m3 | UK. EH40 WEL - Workplace Exposure Limits |
| | | TWA | 150 ppm 724 mg/m3 | UK. EH40 WEL - Workplace Exposure Limits |

Exposure controls

Appropriate engineering controls

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

Personal protective equipment

Eye/face protection

Safety glasses with side-shields conforming to EN166 Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Skin protection

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of Aldrict cwatanimated gloves after use in accordance with applicable laws and good laboratory practices Wash and dry hands.

The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.

Full contact Material: Nitrile rubber Minimum layer thickness: 0.4 mm Break through time: 480 min Material tested: Camatril

Splash contact Material: Nitrile rubber Minimum layer thickness: 0.2 mm Break through time: 49 min Material tested: Dermatril® P

Body Protection

impervious clothing, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Respiratory protection

Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multi-purpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Control of environmental exposure

Do not let product enter drains.

PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Physical State: Liquid

Colour: transparent

Odour: fruity

Initial Boiling Point: 124°C (based on solvents used)

Final Boiling Point: 126°C

Flash Point: 23°C (closed cup)

Evaporation rate: No data available

Flammability: No data available

Upper/lower flammability: Upper explosion limit: 7.6 % or explsosive limits Lower explosion limit: 1.7%

Auto ignition temp: 210C at 1.013.25

Decomposition temperature: no data available

Explosive properties: no data available

Oxidizing Properties: no data available

10. STABILITY AND REACTIVITY

Reactivity: no data available

Stability: Stable under normal use conditions.

Conditions to avoid: Heat, flames, and sparks.

Materials to avoid: Strong oxidising agents, Strong reducing agents

Hazardous Decomposition

Products: None known.

TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Acute toxicity

11.

LD50 Oral - Rat - female - 10,760 mg/kg (OECD Test Guideline 401)

LC50 inhalation – Rat – male and female – 4h - > 21 mg/l (OECD Test Guideline 403)

LD50 Dermal - Rabbit - male - 14,112 mg/kg (OECD Test Guideline 402)

Skin corrosion/irritation

Skin – Rabbit Result: No skin irritation - 4 h (OECD Test Guideline 404)

Serious eve damage/eye irritation

Eyes – Rabbit Result: No Irritating to eyes. (OECD Test Guideline 405)

Respiratory or skin sensitisation

No data available

Germ cell mutagenicity

Ames test S. typhimurium Result: negative

OECD Test Guideline 477Drosophila melanogaster - male and female Result: negative

Carcinogenicity

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

Reproductive toxicity

No data available

Reproductive toxicity - Rat - male and female – Dermal No adverse effect has been observed in chronic toxicity tests.

Developmental Toxicity - Rabbit - Dermal No adverse effect has been observed in chronic toxicity tests

Specific target organ toxicity - single exposure

May cause drowsiness or dizziness. - Central nervous system

Specific target organ toxicity - repeated exposure

No data available

Aspiration hazard

No data available

Additional Information

Repeated dose toxicity - Rat - male and female - Oral - No observed adverse effect level - 250 mg/kg RTECS: KJ9100000

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

| 12. | ECOLOGICAL INFORMATION |
|---|--|
| 12.1 Toxicity: Toxicity to fish | flow-through test LC50 - Pimephales promelas (fathead minnow) - 18 mg/l - 96 h (OECD Test Guideline 203) |
| Toxicity to daphnia and other aquatic invertebrates | static test EC50 - Daphnia (water flea) - 44 mg/l - 48 h |
| Toxicity to algae | static test EC50 - Desmodesmus subspicatus (Scenedesmus subspicatus) - 674.7 mg/l - 72 h |

12.2 Persistence and degradability

aerobic - Exposure time 28 d

Result: 83 % - Readily biodegradable

(OECD Test Guideline 301D)

12.3 Bioaccumulative potential

Does not bioaccumulate Page 5 of 6

12.4 Mobility in soil

No data available

12.5Results of PBT and vPvB assessment

This mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

12.6 Other adverse effects

No data available

DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

Product

13.

Offer surplus and non-recyclable solutions to a licensed disposal company.

Contaminated packaging

Dispose of as unused product.

14. TRANSPORT INFORMATION

14.1 UN number

ADR/RID: 1123 IMDG: 1123

14.2 UN proper shipping name

ADR/RID: Butyl Acetate IMDG: Butyl Acetate IATA: Butyl Acetate

14.3 Transport hazard class(es)

ADR/RID: 3 IMDG: 3

14.4 Packaging group

ADR/RID: III IMDG: III

14.5 Environmental hazards

ADR/RID: no IMDG: Marine Pollutant: no

14.6 Special precautions for user

No data available

15.

REGULATORY INFORMATION

This safety datasheet complies with the requirements of Regulation (EC) No. 453/2010.

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

No data available

15.2 Chemical Safety Assessment

For this product a chemical safety assessment was not carried out [SEP]

16. OTHER INFORMATION

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

It is the policy of Lysis Technologies Ltd wherever possible not to supply inks containing lead and cadmium based pigments. However certain specifications can only be met by using these pigments, and as a consequence inks that contain these pigments have their own Material Safety Data Sheets.

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

H226 Flammable liquid and vapour.

H336 May cause drowsiness or dizziness