Revision date: 18/08/2014 Revision: 3 Supersedes date: 27/03/2014



SAFETY DATA SHEET

DRY CLEANING DETERGENT ADDITIVE

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

1.1. Product identifier

Product name DRY CLEANING DETERGENT ADDITIVE

Product number B143

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

Identified uses A concentrated additive of solvent soluble detergents, wetting agents and deodorisers designed

to improve the cleaning of fabrics during dry cleaning procedures. Dry Cleaning Detergent Additive helps to remove water soluble soils which are not normally removed by dry cleaning

solvents.

1.3. Details of the supplier of the safety data sheet

Supplier www.prochem.co.uk

Prochem Europe Ltd Oakcroft Road Chessington Surrey KT9 1RH

Telephone: 020 8974 1515 Fax: 020 8974 1511 sales@prochem.co.uk

1.4. Emergency telephone number

Emergency telephone 020 8974 1515 (office hours 8am to 5pm Monday to Friday) Emergency Action: In the event

of a medical enquiry involving this product, please contact your doctor or local hospital accident and emergency department, who may seek advice from the UK National Poisons Information

Service, where our full product details are held.

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification

Physical hazards

Flam. Liq. 3 - H226

Health hazards

Skin Irrit. 2 - H315 Eye Irrit. 2 - H319 Asp. Tox. 1 - H304

Environmental hazards

Aquatic Chronic 4 - H413

Classification (67/548/EEC or 1999/45/EC)

Xn;R65. Xi;R41. R10,R53,R66.

Human health

Prolonged skin contact may cause redness, irritation and dry skin. Causes serious eye irritation. Irritating and degreasing to skin. In high concentrations, vapours may be irritating to the respiratory system. Droplets of the product aspirated into the lungs through ingestion or vomiting may cause a serious chemical pneumonia. In high concentrations, vapours and aerosol mists have a narcotic effect and may cause headache, fatigue, dizziness and nausea. In case of overexposure, organic solvents may depress the central nervous system causing dizziness and intoxication, and at very high concentrations unconsciousness and

death. See Section 11 for additional information on health hazards.

Environmental

The product contains a substance which may cause long-term adverse effects in the aquatic environment. The product contains volatile organic compounds (VOCs) which have a photochemical ozone creation potential.

Physicochemical

Flammable/combustible materials. The product may form explosive vapours/air mixtures even at normal room temperatures. Vapours are heavier than air and may travel along the floor and accumulate in the bottom of containers. Vapours may be ignited by a spark, a hot surface or an ember.

2.2. Label elements

Pictogram







Signal word

Danger

Hazard statements

H226 Flammable liquid and vapour.

H304 May be fatal if swallowed and enters airways.

H413 May cause long lasting harmful effects to aquatic life.

H315 Causes skin irritation.

H319 Causes serious eye irritation.

Precautionary statements

P102 Keep out of reach of children.

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking

P280 Wear protective gloves/protective clothing/eye protection/face protection.

P273 Avoid release to the environment.

P331 Do NOT induce vomiting.

P301+P310 IF SWALLOWED: Immediately call a POISON CENTER/doctor.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove

contact lenses, if present and easy to do. Continue rinsing.

P337+P313 If eye irritation persists: Get medical advice/attention.

P501 Dispose of contents / container in accordance with local / regional / national / international

regulations.

Contains Hydrocarbons, C11-C12, isoalkanes, <2% aromatics

 $\textbf{Detergent labelling} \hspace{1cm} \geq 30\% \hspace{0.1cm} \text{aliphatic hydrocarbons, 5 - < 15\% anionic surfactants, < 5\% perfumes, Contains detection of the co$

Limonene, Citral, Linalool, Cinnamal, Geraniol

Supplementary precautionary statements

P403+P235 Store in a well-ventilated place. Keep cool.

2.3. Other hazards

See section 8 for details of exposure limits.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

 Hydrocarbons, C11-C12, isoalkanes, <2% aromatics</th>
 60-100%

 CAS number: 64741-65-7
 EC number: 918-167-1
 REACH registration number: 01-2119472146-39-0001

 Classification
 Classification (67/548/EEC or 1999/45/EC)

 Flam. Liq. 3 - H226
 Xn;R65. R53,R66.

 Asp. Tox. 1 - H304
 Aquatic Chronic 4 - H413

 Docusate sodium

 CAS number: 577-11-7
 EC number: 204-007-1

 Classification
 Classification (67/548/EEC or 1999/45/EC)

 Acute Tox. 4 - H302
 Xi;R38,R41. R10.

 Skin Irrit. 2 - H315
 Eye Irrit. 2 - H319

The Full Text for all R-Phrases and Hazard Statements are Displayed in Section 16.

SECTION 4: First aid measures

4.1. Description of first aid measures

General information

CAUTION! First aid personnel must be aware of own risk during rescue! Remove affected person from source of contamination. Keep affected person away from heat, sparks and flames. Keep the affected person warm and at rest. Get prompt medical attention.

Inhalation

Move affected person to fresh air at once. If breathing stops, provide artificial respiration. When breathing is difficult, properly trained personnel may assist affected person by administering oxygen. Keep affected person warm and at rest. Get medical attention immediately.

Ingestion

Get medical attention immediately. Rinse mouth thoroughly with water. Give plenty of water to drink. Get medical attention. Show this Safety Data Sheet to the medical personnel. Do not induce vomiting. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention.

Skin contact

Remove affected person from source of contamination. Remove contaminated clothing immediately and wash skin with soap and water. Get medical attention if any discomfort continues.

Eye contact

Promptly wash eyes with plenty of water while lifting the eye lids. Continue to rinse for at least 15 minutes and get medical attention. May cause permanent damage if eye is not immediately irrigated.

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

General information

If adverse symptoms develop as described the casualty should be transferred to hospital as soon as possible.

Inhalation

Irritation of nose, throat and airway. Vapours may cause headache, fatigue, dizziness and nausea. In high concentrations, vapours are anaesthetic and may cause headache, fatigue, dizziness and central nervous system effects. In case of overexposure, organic solvents may depress the central nervous system causing dizziness and intoxication, and at very high concentrations unconsciousness and death.

Ingestion

May cause stomach pain or vomiting. Drowsiness, discrientation, vertigo. Ingestion of large amounts may cause unconsciousness. Central nervous system depression.

Skin contact

Skin irritation. Prolonged or repeated contact with skin may cause irritation, redness and dermatitis.

Eye contact

Irritating and may cause redness and pain. May cause blurred vision and serious eye damage.

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

Notes for the doctor

No recommendation given, but first aid may still be required in case of accidental exposure, inhalation or ingestion of this chemical. If in doubt, GET MEDICAL ATTENTION PROMPTLY!

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media

Extinguish with the following media: Water spray, fog or mist. Foam, carbon dioxide or dry powder. Dry chemicals, sand, dolomite etc.

Unsuitable extinguishing media

Do not use water jet as an extinguisher, as this will spread the fire.

5.2. Special hazards arising from the substance or mixture

Specific hazards

The product is flammable. Solvent vapours may form explosive mixtures with air. Vapours are heavier than air and may spread near ground and travel a considerable distance to a source of ignition and flash back. May ignite at high temperature. Containers can burst violently or explode when heated, due to excessive pressure build-up. Vapours may be ignited by a spark, a hot surface or an ember.

Hazardous combustion products

Thermal decomposition or combustion products may include the following substances: Oxides of carbon.

5.3. Advice for firefighters

Protective actions during firefighting

Fight fire from safe distance or protected location. Containers close to fire should be removed or cooled with water. Move containers from fire area if it can be done without risk. Cool containers exposed to flames with water until well after the fire is out. Water spray should be used to cool containers. Be aware of risk of fire re-starting, and risk of explosion. Control run-off water by containing and keeping it out of sewers and watercourses. If risk of water pollution occurs, notify appropriate authorities.

Special protective equipment for firefighters

Wear positive-pressure self-contained breathing apparatus (SCBA) and appropriate protective clothing.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions

Avoid inhalation of vapours and contact with skin and eyes. Eliminate all sources of ignition. Follow precautions for safe handling described in this safety data sheet. Wear protective clothing as described in Section 8 of this safety data sheet. Use suitable respiratory protection if ventilation is inadequate. Take precautionary measures against static discharges. In case of spills, beware of slippery floors and surfaces.

6.2. Environmental precautions

Environmental precautions

Avoid the spillage or runoff entering drains, sewers or watercourses. Avoid or minimise the creation of any environmental contamination. Spillages or uncontrolled discharges into watercourses must be reported immediately to the Environmental Agency or other appropriate regulatory body. To prevent release, place container with damaged side up. Contain spillage with sand, earth or other suitable non-combustible material. Collect and dispose of spillage as indicated in Section 13.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up

Ventilate well, stop flow of gas or liquid if possible. Remove ignition sources. Do not allow chemical to enter confined spaces such as sewers due to explosion risk. Sewers designed to preclude formation of explosive concentrations of vapour may be permitted. Extinguish all ignition sources. Avoid sparks, flames, heat and smoking. Ventilate. Remove sources of ignition. Stop leak if possible without risk. Small Spillages: Leave small quantities to evaporate, if safe to do so. Do not allow material to enter confined spaces, due to the risk of explosion. Large Spillages: Contain and absorb spillage with sand, earth or other non-combustible material. Collect and place in suitable waste disposal containers and seal securely. Label the containers containing waste and contaminated materials and remove from the area as soon as possible. Flush contaminated area with plenty of water. Should be prevented from entering drains. Containers with collected spillage must be properly labelled with correct contents and hazard symbol. Label the containers containing waste and contaminated materials and remove from the area as soon as possible. Spillage may be stored as chemical waste in approved area. Clean-up personnel should use respiratory and/or liquid contact protection. Wash thoroughly after dealing with a spillage.

6.4. Reference to other sections

Reference to other sections

Wear protective clothing as described in Section 8 of this safety data sheet. See Section 11 for additional information on health hazards. Collect and dispose of spillage as indicated in Section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Usage precautions

Keep away from heat, sparks and open flame. Avoid spilling. Avoid contact with skin and eyes. Observe occupational exposure limits and minimise the risk of inhalation of vapours and mist. Use mechanical ventilation in case of handling which causes formation of vapours. Always wear an approved organic solvent cartridge mask when applying this product. Wear suitable protective equipment for prolonged exposure and/or high concentrations of vapours, spray or mist. Do not use in confined spaces without adequate ventilation and/or respirator. Static electricity and formation of sparks must be prevented. Do not eat, drink or smoke when using the product.

7.2. Conditions for safe storage, including any incompatibilities

Storage precautions

Flammable/combustible materials. Keep away from oxidising materials, heat and flames. Store in tightly-closed, original container in a dry, cool and well-ventilated place. May attack some plastics, rubber and coatings. Take precautionary measures against static discharges. Do not store near heat sources or expose to high temperatures. Protect from freezing and direct sunlight. Keep away from food, drink and animal feeding stuffs.

Storage class

Flammable liquid storage.

7.3. Specific end use(s)

Specific end use(s)

The identified uses for this product are detailed in Section 1.2.

SECTION 8: Exposure Controls/personal protection

8.1. Control parameters

Occupational exposure limits

Hydrocarbons, C11-C12, isoalkanes, <2% aromatics

Long-term exposure limit (8-hour TWA): SUP 150 ppm 1000 mg/m3 SUP = Supplier's recommendation.

Ethanol

Long-term exposure limit (8-hour TWA): WEL 1000 ppm 1920 mg/m3

Short-term exposure limit (15-minute): WEL

WEL = Workplace Exposure Limit

Ingredient comments

SUP = Supplier's recommendation.

8.2. Exposure controls

Protective equipment







Appropriate engineering controls

Provide adequate general and local exhaust ventilation. Observe any occupational exposure limits for the product or ingredients. All handling should only take place in well-ventilated areas. Use explosion-proof general and local exhaust ventilation.

Eye/face protection

Eyewear complying with an approved standard should be worn if a risk assessment indicates eye contact is possible. The following protection should be worn: Chemical splash goggles.

Hand protection

Chemical-resistant, impervious gloves complying with an approved standard should be worn if a risk assessment indicates skin contact is possible. Solvent resistant nitrile gloves are recommended. Protective gloves should be inspected for wear before use and replaced regularly in accordance with the manufacturers specifications.

Other skin and body protection

Wear appropriate clothing to prevent any possibility of liquid contact and repeated or prolonged vapour contact.

Hygiene measures

Do not smoke in work area. Wash hands at the end of each work shift and before eating, smoking and using the toilet. Promptly remove any clothing that becomes contaminated. When using do not eat, drink or smoke.

Respiratory protection

Always wear an approved organic solvent cartridge mask when applying this product. Chemical respirator with specific cartridge providing protection against the compound of concern. If ventilation is inadequate, suitable respiratory protection must be worn. Change filters frequently. Consult instructions before use.

SECTION 9: Physical and Chemical Properties

9.1. Information on basic physical and chemical properties

Appearance

Clear liquid. Solvent.

Colour

Colourless.

Odour

Lemon. Floral

Odour threshold

Not determined.

pΗ

Not applicable.

Melting point

Not determined.

Initial boiling point and range

Not determined.

Flash point

34.5°C CC (Closed cup).

Evaporation rate

Not determined.

Other flammability

Flammable/combustible materials.

Vapour pressure

Not determined.

Vapour density

Not determined.

Relative density

0.793

Solubility(ies)

Insoluble in water. Soluble in the following materials: Hydrocarbons.

Partition coefficient

Not determined.

Auto-ignition temperature

Not determined.

Decomposition Temperature

Not determined.

Viscosity

Not determined.

Explosive properties

Not applicable.

Oxidising properties

Not applicable.

9.2. Other information

Other information

None.

SECTION 10: Stability and reactivity

10.1. Reactivity

The following materials may react with the product: Strong oxidising agents.

10.2. Chemical stability

Stability

Stable at normal ambient temperatures and when used as recommended.

10.3. Possibility of hazardous reactions

The following materials may react with the product: Strong oxidising agents. Acids. Alkalis.

10.4. Conditions to avoid

Avoid heat, flames and other sources of ignition. Avoid contact with strong oxidising agents. Avoid contact with acids.

10.5. Incompatible materials

Materials to avoid

Strong oxidising agents.

10.6. Hazardous decomposition products

Thermal decomposition or combustion products may include the following substances: Oxides of carbon.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Toxicological effects

Gas or vapour in high concentrations may irritate the respiratory system. Vapour may affect central nervous system. Symptoms following overexposure may include the following: Headache. Nausea, vomiting. Intoxication. May cause discomfort.

Prolonged inhalation of high concentrations may damage respiratory system. Aspiration hazard if swallowed. Entry into the lungs following ingestion or vomiting may cause chemical pneumonitis. When working extensively on big surfaces in small and badly ventilated rooms, vapours may develop in concentrations which may cause malaise such as headache, dizziness and nausea. Liquid irritates mucous membranes and may cause abdominal pain if swallowed. Gastrointestinal symptoms, including upset stomach. Irritating. May be absorbed in the body and cause dizziness, nausea and vomiting. Swallowing concentrated chemical may cause severe internal injury. May be harmful or fatal if aspirated into lungs.

Acute toxicity - oral

ATE oral (mg/kg)

16.250.0

Serious eye damage/irritation

Risk of serious damage to eyes. Irritating and may cause redness and pain. Repeated exposure may cause chronic eye irritation.

Skin sensitisation

Contains Limonene Citral Linalool Cinnamal Geraniol

Germ cell mutagenicity

Genotoxicity - in vivo

No effects expected based upon current data.

Carcinogenicity

No effects expected based upon current data.

Reproductive toxicity

Reproductive toxicity - fertility

No effects expected based upon current data.

General information

Prolonged and repeated contact with solvents over a long period may lead to permanent health problems.

Skin contact

Acts as a defatting agent on skin. May cause cracking of skin, and eczema. Prolonged contact may cause redness, irritation and dry skin.

Route of entry

Inhalation Ingestion. Skin and/or eye contact

Target organs

Central nervous system Eyes Gastro-intestinal tract Respiratory system, lungs Skin Blood Kidneys Liver

Medical symptoms

Eye contact may cause: Irritation, burning, lachrymation, blurred vision after liquid splash. High concentrations of vapours may irritate respiratory system and lead to headache, fatigue, nausea and vomiting. May cause discomfort if swallowed. Gastrointestinal symptoms, including upset stomach. Diarrhoea. Central nervous system depression. Drowsiness, disziness, disorientation, vertigo. Nausea, vomiting.

Medical considerations

Skin disorders and allergies. Convulsions. Central nervous system depression. Splash in eye requires examination by eye specialist. Persons with rash are directed to skin expert for examination of allergic eczema.

Toxicological information on ingredients.

Hydrocarbons, C11-C12, isoalkanes, <2% aromatics

Acute toxicity - oral

Acute toxicity oral (LD50 mg/kg)

5,000

Species

Rat

Acute toxicity - dermal

Acute toxicity dermal (LD50 mg/kg)

5000

Species

Rabbit

SECTION 12: Ecological Information

Ecotoxicity

The product contains a substance which may cause long-term adverse effects in the aquatic environment. The product contains volatile organic compounds (VOCs) which have a photochemical ozone creation potential.

12.1. Toxicity

Ecological information on ingredients.

Hydrocarbons, C11-C12, isoalkanes, <2% aromatics

Acute toxicity - fish

LC50, >: > 100 mg/l,

Acute toxicity - aquatic invertebrates

EC₅₀, >: > 100 mg/l,

Acute toxicity - aquatic plants

IC₅₀, >: > 100 mg/l,

Chronic toxicity - fish early life stage

NOEC, <: < 1.0 mg/l,

Chronic toxicity - aquatic invertebrates

NOEC, <: 10 mg/l,

12.2. Persistence and degradability

Persistence and degradability

Inherently biodegradable. Oxidises rapidly by photochemical reactions in air.

12.3. Bioaccumulative potential

The product contains potentially bioaccumulating substances.

Partition coefficient

Not determined.

Ecological information on ingredients.

Hydrocarbons, C11-C12, isoalkanes, <2% aromatics

Partition coefficient

: 6.7-7.2

12.4. Mobility in soil

Mobility

The product is insoluble in water and will spread on the water surface.

12.5. Results of PBT and vPvB assessment

This product does not contain any substances classified as PBT or vPvB.

12.6. Other adverse effects

The product contains volatile organic compounds (VOCs) which have a photochemical ozone creation potential.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

General information

Waste is classified as hazardous waste. Disposal to licensed waste disposal site in accordance with the local Waste Disposal Authority. Waste, residues, empty containers, discarded work clothes and contaminated cleaning materials should be collected in designated containers, labelled with their contents. When handling waste, the safety precautions applying to handling of the product should be considered.

Disposal methods

Dispose of waste and residues in accordance with local authority requirements. Confirm disposal procedures with environmental engineer and local regulations. Do not allow runoff to sewer, waterway or ground. Dispose of waste via a licensed waste disposal contractor.

SECTION 14: Transport information

14.1. UN number

UN No. (ADR/RID) 3295 **UN No. (IMDG)** 3295

14.2. UN proper shipping name

Hydrocarbons, Liquid, N.O.S (Solvent Naphtha solution)

14.3. Transport hazard class(es)

IMDG class 3

14.4. Packing group

ADR/RID packing group III

IMDG packing group III

14.5. Environmental hazards

Environmentally hazardous substance/marine pollutant

No.

14.6. Special precautions for user

No special storage precautions required. Supplied in accordance with "Limited Quantity" provisions.

14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

Not applicable.

SECTION 15: Regulatory information

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

National regulations

The Control of Substances Hazardous to Health Regulations 2002 (SI 2002 No. 2677) (as amended). The Chemicals (Hazard Information and Packaging for Supply) Regulations 2009 (SI 2009 No. 716).

EU legislation

Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) (as amended). 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 (as amended).

15.2. Chemical safety assessment

No chemical safety assessment has been carried out.

SECTION 16: Other information

General information

Telephone 020 8974 1515

Revision date 18/08/2014

Revision 3

Supersedes date 27/03/2014

Signature Aaron Saunders

Risk phrases in full

R10 Flammable.

The product is highly flammable.

R38 Irritating to skin.

R41 Risk of serious damage to eyes.

R53 May cause long-term adverse effects in the aquatic environment.

R65 Harmful: may cause lung damage if swallowed.

R66 Repeated exposure may cause skin dryness or cracking.

Hazard statements in full

H225 Highly flammable liquid and vapour.

H226 Flammable liquid and vapour.

H302 Harmful if swallowed.

H304 May be fatal if swallowed and enters airways.

H315 Causes skin irritation.

H319 Causes serious eye irritation.

H413 May cause long lasting harmful effects to aquatic life.

Disclaimer

For additional information on safety, training and use of this product, contact the supplier. This product is intended for professional use only. The information given is intended to be of assistance to users but is without guarantee. Variations can occur in application and users are advised to conduct their own tests. Suggestions for use neither give nor imply any guarantee as to the intended use.