MATERIAL SAFETY DATA SHEET

According to EC Directive 2001/58/EC

1. Identification of the Substances or Preparation and of the Company

1.1 Identification of preparation: Dye Gone Solution A

1.1.2 Date of Revision: July 15, 2008

1.1.3 Use of preparation: Spotting Agent

1.2 Company identification:

Chemspec Europe

Unit 36C, Tong Park

Otley Road, Baildon

West Yorkshire BD17 7QD UK

Tel: 01274 597333 Fax: 01274 597444

1.3 Emergency telephone number, official advisory bodies:

1.3.1 For medical emergency call Chemspec Europe Ltd +44 (0) 1274 597333 (office hours)

2. <u>Composition/Information on Ingredients</u>

2.1 Chemical Description: Ammonia 10% solution (Cleaning Solution)

2.2 Hazardous Ingredients:

| Chemical Name | % | CAS-No. | index# | Hazard Symbol | R-Phrases |
|---------------|----|-----------|------------------|---------------|-----------|
| Ammonia | 10 | 1336-21-6 | 007-001- 01-2 | Corrosive | 34, |

2.3.

Classification under CHIP: C: R34

Classification under CLP: Skin Corr: 18: H314 Most important adverse effects: Causes burns.

Label elements under CLP:

Hazard statements H314: Causes severe skin burns and eye damage.

Signal words Danger

Hazard pitograms: GH505: Corrosion

Precautionary statements: P264: Wash hands thoroughly after handling. P280: Wear protective gloves/protective clothing/eye protection/face

protection.

P305 + 351+338: IF IN EYES .: Rinse cautiously with water for several minutes.

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

P405 Store locked up.

P501: Dispose of contents /container to an approved waste disposal site.

PBT: This substance is not classified as a PBT substance.

2.4. Precautionary statements

GH505 Corrosion

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

P305. 351 338: If in eyes. Rinse cautiously with water for several minutes, Remove contact lenses, if present and easy to do. Continue rinsing.

P405: Store locked up

P501: Dispose of contents /container to an approved waste disposal site.

3. Possible Hazards

3.1 Mixtures

Hazardous ingredients

AMMONIA 20% SOLUTION

| EINECS | CAS | CHIP Classification | CLP Classification | Percent | |
|--------|-----------|------------------------|------------------------|---------|--|
| - | 1336-21-6 | C:R34 | Skin Corr: 18: H314 | 30-50% | |

4. First Aid Measures

- Inhalation: .Remove casualty from exposure ensuring ones own safety whilst doing so. If unconscious check for breathing and apply artificial respiration if necessary. If unconscious and breathing is okay, place in the recovery position. If conscious ensure the casualty sits or lies down. If breathing becomes bubbly, have the casualty sit and provide oxygen if available. Transfer to hospital as soon as possible.
- 4.2 Eye contact: Bathe the eye with water for at least 15 minutes. Transfer to hospital for specialist examination.
- 4.3 Skin contact: Remove all contaminated clothes and footwear immediately unless stuck to skin.

 Drench the affected skin with running water for 10 minutes or longer if substance is still on skin.

 Transfer to hospital if there are burns or symptoms of poisoning.
- 4.4 Ingestion: Wash out mouth with water. Do not induce vomiting. Give 1 cup of water to drink every 10 minutes. If unconscious check for breathing and apply artificial respiration if necessary. If unconscious and breathing is okay, place in the recovery position. Transfer to hospital as soon as possible.

Most important symptoms and effects both acute and delayed

- 4.5 Skin Contact: Blistering may occur
- 4.6 Eye Contact: Corneal burns may occur. May cause permanent damage.
- 4.7 Ingestion: Corrosive burns may appear around the lips. Blood may be vomited. There may be bleeding from the mouth and nose
- 4.8 Inhalation: There may be shortness of breath with a burning sensation in the throat. Exposure may cause coughing or wheezing.
- 4.9 Delayed/immediate effects: Immediate effects can be expected after short term exposure.
- 4.10 Immediate/special treatment: Eye bathing equipment should be available on the premises.

5. Fire Fighting Measures

- 5.1 Suitable extinguishing media for the surrounding fire should be used. Use water spray to cool containers.
- 5.2 Advice for fire fighters: Wear self contained breathing apparatus. Wear protective clothing to prevent contact with skin and eyes.
- 5.3 Special exposure hazards: Corrosive in combustion emits toxic fumes.

6. Accidental Release Measures

- Personal precautions: Notify the police and fire brigade immediately. If outside keep bystanders upwind and away from danger point. Mark out the contaminated area with signs and prevent access to unauthorised personnel. Do not attempt to take action without suitable protective clothing see section 8 of SDS. Turn leaking containers leek side up to prevent the escape of liquid.
- 6.2 Environmental precautions: Do not discharge into drains or rivers . Contain the spillage using bunding.
- 6.3 Methods of cleaning up: Clean-up should be dealt with only by qualified personnel familiar with the specific substance. Absorb into dry earth or sand. Transfer to a disposable, labelled salvage container for disposal by an appropriate method.

7. Handling and Storage

- 7.1 Handling: Avoid direct contact with this substance. Ensure there is sufficient ventilation of the area. Do not handle in a confined space. Avoid the formation or spread of mists in the air
- 7.2 Storage: Store in cool well ventilated area. Keep container tightly closed

7.3 Suitable packaging: Do not use aluminium containers.

8. Exposure Controls/Personal Protection

| 8.1. Control | Peramiters |
|--------------|-------------------|
|--------------|-------------------|

Workplace exposure limits: Not applicable

Exposure controls

Please use common sense when handling this product.

- 8.3 Engineering measures: Ensure there is sufficient ventilation of the area
- 8.4 Respiratory protection: Self-contained breathing apparatus must be available in in case if emergency.
- 8.5 Hand protection: Impermeable gloves.
- 8.6 Eye protection: Tightly fitting safety goggles. Ensure eye bath is to hand.
- 8.7 Skin protection: Impermeable protective clothing.
- 8.8 Working hygiene: Take usual precautions when handling.

9. Physical and Chemical Properties

- 9.1.1 Appearance: Liquid
- 9.1.2 Color: Colorless
- 9.1.3 Odor: Pungent
- 9.1.4 Oxidising: Non-oxidising (by EC criteria)
- 9.1.5 Viscosity: Non -viscous
- 9.2 pH: 12
- 9.3 Flammability limits % lower: 16 upper: 27
- 9.4 Relative density: 0.9
- 9.5 Autoflammability in C: 650
- 9.6 Vapour pressure: 115mm @ 20 degrees C

10. Stability and Reactivity

- 10.1 Stable under recommended transport or strong conditions
- 10.2 Chemical stability: Stable under normal conditions
- 10.3 Hazardous reactions: Hazardous reactions will not occur under normal transport or storage conditions. Decomposition may occur on exposure to conditions or materials listed below.
- 10.4 Conditions to avoid: Heat
- 10.5 Materials to avoid: Strong oxydising agents . Strong acids.
- 10.6 Haz. decomp. products: in combustion emits toxic fumes.

11. <u>Toxicological Information</u>

EFFECT ROUTE BASIS

- 11.1 Corrosivity : CPT INHDRM Hazardous calculated
- 11.2 Delayed /immediate effects: Immediate effects can be expected after short term exposure.
- 11.3 Skin contact: Progressive ulceration will occur if treatment is not immediate. Blistering may occur. Severe burns may occur.
- 11.4 Eye Contact: Corneal burns may occur. May cause permanent damage.
- 11.5 Ingestion Corrosive burns may appear around the lips. Blood may be vomited. There may be bleeding from the mouth or nose.
- 11.6 Inhalation: There may be shortness of breath with a burning sensation in the throat. Exposure may cause coughing and wheezing.

12. Ecological Information

- 12.1 Biodegradability: Biodegradable.
- 12.2 Mobility in Soil: Readily absorbed into soil.
- 12.3 Bio-accumulation: No bioaccumulation potential.
- 12.4 Other relevant ecological information: Harmful to fauna.
- 12.5 This substance is not identified as a PBT substance.

- 12.6 Ecotoxicity values: Negligible ecotoxicity.
- 13. Disposal
- 13.1 Dispose of in accordance with local regulations
- 13.2 Disposal operations: Transfer to a suitable container and arrange for collection by specialist disposal company.
- 13.3 NB: The users attention is drawn to the possible existence of regional or national regulations regarding disposal.

14. Transport Information

UN number: UN2672

UN proper shipping name: Ammonia Solution

Transport Class: 8 Packing group: 18

- 14.1 Environmentally hazardous: no
- 14.2 No special precautions

Tunnel code E

Transport category 3

14.3 Chemical Safety Assessment: A chemical safety assessment has not been carried out for the substance or the mixture by the supplier

15. Regulations

Label elements under CHIP

- 15.1 This safety data sheet is prepared in accordance with the commission Regulation (EU) No 453/2010
- 15.2 Symbol: Corrosive
- 15.3 R-Sentences:

R34: Causes burns

15.4 S-Sentences:

S2: Keep out of reach of children.

S26: In case of contact with eyes, rinse immediately with plenty of water and seek medical advise

S36, S37,S39: Wear suitable protective clothing. Gloves and eye/face protection.

S45: In case of accident or if you feel unwell, seek medical advice immediately (Show the label where possible)

16. Other Information

Phrases used in 2 & 3

H314: Causes severe skin burns and eye damage

R34: Causes burns

DISCLAIMER OF LIABILITY

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. This company shall not be held liable for any damage resulting from handling or from contact with the above product.

The manufacturer and seller warrants that this product conforms to its standard specifications when used according to directions. As the conditions or methods of use are beyond our control, we do not assume any responsibility and expressly disclaim any liability for use of this product. Information contained herein is believed to be true and accurate but all statements or suggestions are made without any warranty, expressed or implied, regarding accuracy of the information, the hazards connected with the use of the material and the results to be obtained from the use thereof.

MATERIAL SAFETY DATA SHEET

According to EC Directive 2001/58/EC

1. Identification of the Substances or Preparation and of the Company

- 1.1 Identification of preparation: Dye Gone Solution B
- 1.1.2 Date of Revision: July 15, 2008
- 1.1.3 Use of preparation: Spotting Agent
- 1.2 Company identification:

Chemspec Europe

Unit 36C, Tong Park

Otley Road, Baildon

West Yorkshire BD17 7QD UK

Tel: 01274 597333 Fax: 01274 597444

- 1.3 Emergency telephone number, official advisory bodies:
- 1.3.1 For medical emergency call Chemspec Europe Ltd +44(0)1274 597333 (office hours)

2. <u>Composition/Information on Ingredients</u>

2.1 Chemical Description: Hydrogen Peroxide 35%

2.2 Hazardous Ingredients:

| Chemical Name | % | CAS-No. | EC# | Hazard Symbol | R-Phrases |
|-------------------|----|-----------|-----------|---------------|-----------|
| Hydrogen Peroxide | 35 | 7722-84-1 | 231-765-0 | harmful | 22,37,38 |
| | | 1 | | | ,41 |

2.3 .

Classification under CHIP: Xn; R22; Xi,R37/38, Xi, R41

Label elements under CLP

Hazard statements H302: Harmful if swallowed

H316: Causes skin irritation

H318: Causes serious eye damage

Signal words Danger

Hazard pitograms: GH505: Corrosion

GH507: Exclamation mark

Most important harmful effects: Harmful if swallowed. Irritating to respiratory system and skin. Risk of serious damage to eyes.

2.4. Precautionary statements

P264. Wash hands thoroughly after handling

P270. Do not eat, drink or smoke when using the product

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

P301. 310. If swallowed: Immediately call a poison centre or doctor.

P305. 351 338: If in eyes: Rinse cautiously with water for several minutes, Remove

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

P310: Immediately call a poison centre or doctor

P330: Rinse mouth.

3. Possible Hazards

- For humans: May cause eye and skin irritation. Ingestion may cause irritation of the digestive tract, nausea and diarrhea.
- 3.2 For environment: None known.

4. <u>First Aid Measures</u>

Inhalation: Remove casualty from exposure ensuring ones own safety whilst doing so. If unconscious check for breathing and apply artificial respiration if necessary. If unconscious and breathing is okay, place in the recovery position. Transfer to hospital as soon as possible.

- 4.2 Eye contact: Flush with water for at least 15 minutes. Transfer to hospital for specialist examination.
- 4.3 Skin contact: Remove all contaminated clothes and footwear immediately unless stuck to skin. Drench the affected skin with running water for 10 minutes or longer if substance is still on skin. Transfer to hospital if there are burns or symptoms of poisoning.
- 4.4 Ingestion: Do not induce vomiting. Give 1 cup of water to drink every 10 minutes. If unconscious check for breathing and apply artificial respiration if necessary. If unconscious and breathing is okay, place in the recovery position. Transfer to hospital as soon as possible.

5. Fire Fighting Measures

- 5.1 Suitable extinguishing media: Dry chemical powder, Carbon dioxide, alcohol or polymer foam.
- Advice for fire fighters: Wear self contained breathing apparatus. Wear protective clothing to 5.2 prevent contact with skin and eyes.
- 5.3 Special exposure hazards: Corrosive, in combustion emits toxic fumes.

Accidental Release Measures

- 6.1 Personal precautions: Eliminate all sources of ignition. Mark out the contaminated area with signs and prevent access to unauthorised personnel
- 6.2 Environmental precautions: Do not discharge into drains or rivers. Contain the spillage using
- 6.3 Methods of cleaning up: Clean-up should be dealt with only by qualified personnel familiar with the specific substance. Refer to section 13 of SDS for suitable method of disposal.

Handling and Storage

- 7.1 Handling: Ensure there is sufficient ventilation of the area. Avoid direct contact with the substance. Smoking is forbidden.
- 7.2 Storage: Store in cool, well ventilated area. Keep container tightly closed, Keep away from sources of ignition.
- 7.3 Suitable packaging: Must only be kept in original packaging.

Exposure Controls/Personal Protection

8.1. Control Parameters

Workplace exposure limits:

Respirable dust

8 hour TWA

15 MIN.STEL

UK 1.4mgm3 2.8g/m3

Hazardous ingredients:

Hydrogen Peroxide 100%

8.2. Workplace exposure limits:

8 hour TWA 15 min.STEL 1.4 mg/m2.8 mg/m3

Exposure controls

UK

Please use common sense when handling this product.

- Engineering measures: Ensure there is sufficient ventilation of the area 8.3
- Respiratory protection: Self-contained breathing apparatus must be available in 8.4 case of emergency.
- 8.5 Hand protection: Protective gloves recommended.
- Eye protection: Safety goggles. Face shield. Ensure eye bath is to hand. 8.6
- Skin protection: Protective clothing with elasticated cuffs and closed neck. Boots 8.7 made of PVC. PVC apron covering the tops of the boots. Ensure safety shower is to hand.
- 8.8 Working hygiene: Take usual precautions when handling.

9. **Physical and Chemical Properties**

- 9.1.1 Appearance: Liquid
- 9.1.2 Color: Colorless
- 9.1.3 Odor: Pungent
- 9.2 pH: <3
- 9.3 Boiling point/boiling range in ⁰ C: 126
- 9.4 Solubility in water: Miscible in all proportions
- 9.5 Melting point in ⁰C: -40
- 9.6 Inflammation: n. av.

10. Stability and Reactivity

- 10.1 Stable under recommended transport or strong conditions
- 10.2 Chemical stability: Unstable
- 10.3 Materials to avoid: Heat, reducing agents, organic materials.
- 10.4 Hazardous decomposition products: In combustion emits toxic fumes of carbon dioxide/carbon monoxide.

11. Toxicological Information

| EFFECT | ROUTE | BASIS | | | |
|---|---|--|--|--|--|
| Acute toxicity | y: (harmful) ING | Hazardous: calculated | | | |
| Irritation | INH DRM | Hazardous: calculated | | | |
| Delayed /immediate effects: Immediate effects can be expected after short term exposure. | | | | | |
| Skin contact: Irritation or pain may occur ay the site of contact. Blistering may occur. Severe | | | | | |
| burns may oc | cur. | | | | |
| | Acute toxicity Irritation Delayed /imm Skin contact: | Acute toxicity: (harmful) ING Irritation INH DRM Delayed /immediate effects: Immedia | | | |

- 11.5 Ingestion: There may be soreness and redness of the mouth and throat. There may be difficulty swallowing. Corrosive burns may appear around the lips. Nausea and stomach pain may occur. There may be vomiting.
- Inhalation: There may be a feeling of tightness in the chest with shortness of breath. Exposure may cause coughing or wheezing. There may be congestion of the lungs causing severe shortness of breath. There may be loss of consciousness.

12. Ecological Information

- 12.1 Water-Hazard class: None (U.S.)
- 12.2 Biodegradability: Photodegradable.
- 12.3 Bio-accumulation: No bioaccumulation potential.
- 12.4 Other relevant ecological information: Harmful to fauna.
- 12.5 This substance is not identified as a PBT substance.
- 12.6 Ecotoxicity values:

| Specimens | Test | Value | Units | | |
|-----------|----------|----------|-------|--|--|
| FISH | 96H LC50 | 16-37 | mg/1 | | |
| DAPHNIA | 48H EC50 | 2.4 -7 0 | mg/1 | | |
| ALGAE | - | 1.7 | mg/1 | | |

13. Disposal

- 13.1 Dispose of in accordance with local regulations.
- NB: The users attention is drawn to the possible existence of regional or national regulations regarding disposal.

14. Transport Information

UN number: UN2014

UN proper shipping name: Hydrogen Peroxide Aqueous Solution

Transport Class: 5.1 + 8 (8)

Shipping name: HYDOGEN PEROXIDE Aqueous Solution

- 14.1 Environmentally hazardous i no
- 14.2 No special precautions

Tunnel code: E

Transport category: 2

15. Regulations

Label elements under CHIP

- 15.1 This safety data sheet is prepared in accordance with the Commission Regulation (EU) No
- 15.2 Symbol: Harmful
- 15.3 R-Sentences:

R22: Harmful if swallowed.

R37/38: Irritating to respiratory system and skin.

R41: Risk of serious damage to eyes.

15.4 S-Sentences:

S2: Keep out of reach of children.

S26: In case of contact with eyes, rinse immediately with plenty of water and seek medical advise.

S37: Wear suitable gloves.

S39: Wear eye/face protection.

16. Other Information

Phrases used in 2 & 3

H271: May cause fire or explosion, strong oxydiser.

H302: Harmful if swallowed.

H314: Causes severe skin burns and eye damage.

H315: Causes skin irritation.

H318: Causes serious eye damage.

H332: Harmful if inhaled.

R5: Heating may cause an explosion.

R8: Contact with combustible material may cause fire.

R20/22: Harmful by inhalation and if swallowed.

R35: Causes severe burns.

R37/38: Irritating to respiratory system and skin

R41: Risk of serious damage to eyes

DISCLAIMER OF LIABILITY

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The manufacturer and seller warrants that this product conforms to its standard specifications when used according to directions. As the conditions or methods of use are beyond our control, we do not assume any responsibility and expressly disclaim any liability for use of this product. Information contained herein is believed to be true and accurate but all statements or suggestions are made without any warranty, expressed or implied, regarding accuracy of the information, the hazards connected with the use of the material and the results to be obtained from the use thereof.