# Material Safety Data Sheet

## Top protector

## Section 1. Chemical product and company identification

| | | | |
|---|---|---|---|
| **Manufacturer** | : HG International b.v. | **Code** | : 2720100 |
| **Address** | : Damsluisweg 70 1332 EJ Almere | **MSDS#** | : 2.03 |
| **Country** | : Netherlands | **Validation date** | : 6/2/2010. |
| **Telephone No.:** | : +31 (0)36 54 94 700 | **Print date** | : 6/2/2010. |
| **Fax** | : +31 (0)36 54 94 744 | **Responsible name** | : P. Stienstra |
| **Internet:** | : www.hg.eu | **Telephone No.:** | : +1.705.726.5445 |
| **Supplier** | : Solstrand Trading | **Fax** | : +1.705.734.0857 |
| **Address** | : 60 Lockhart road Barrie, Ontario L4N 9G8 | **Country** | : Canada |

**Material uses** : Protection against (edible) oils, vegetable and animal fats and many other kinds of dirt.

**In Case of Emergency** : **Chem. Tel Inc. (813) 248 0585 or Toll free (800) 255 3924**

## Section 2. Composition, Information on Ingredients

| Name | CAS # | % by weight | Exposure limits |
|---|---|---|---|
| N-Methyl-2-pyrrolidone | 872-50-4 | 1 - 5 | Not available. |
| Florinated polymer | | 1-5 | Not available. |
| | | 1-5 | Not available. |
| Acetic acid | 64-19-7 | 0-0.1 | Not available. |
| poly(oxy-1,2-ethanediyl), .alpha.-hydro-.omega.-hydroxy-, ether with .alpha.-fluoro-.omega.-(2-hydroxyethyl)poly(difluoromethylene) (1:1) | 65545-80-4 | 0.01-0.05 | Not available. |
| propan-2-ol | 67-63-0 | 0.01-0.05 | Not available. |
| 1,3-Dioxolane | 646-06-0 | 0.0001-0.01 | Not available. |

## Section 3. Hazards identification

**Physical State and Appearance** : Liquid.

**Emergency overview** :

NOT EXPECTED TO PRODUCE SIGNIFICANT ADVERSE HEALTH EFFECTS WHEN THE RECOMMENDED INSTRUCTIONS FOR USE ARE FOLLOWED.

No known significant effects or critical hazards. Avoid prolonged contact with eyes, skin and clothing.

**Routes of entry** : Dermal contact. Eye contact. Ingestion.

**Potential acute health effects**

**Eyes** : No known significant effects or critical hazards.

**Skin** : No known significant effects or critical hazards.

**Inhalation** : Exposure to decomposition products may cause a health hazard. Serious effects may be delayed following exposure.

**Ingestion** : No known significant effects or critical hazards.

**Potential chronic health effects** :
**CARCINOGENIC EFFECTS**: Not available.
**MUTAGENIC EFFECTS**: Not available.
**TERATOGENIC EFFECTS**: Not available.

**Medical conditions aggravated by overexposure:** : Repeated or prolonged exposure is not known to aggravate medical condition.

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**Over-exposure signs/symptoms** : Not available.

See toxicological Information (section 11)

## Section 4. First aid measures

**Eye Contact** : Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention if irritation occurs.

**Skin Contact** : Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur. Wash clothing before reuse. Clean shoes thoroughly before reuse.

**Inhalation** : Move exposed person 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. Get medical attention if symptoms occur. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband. 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.

**Ingestion** : Wash out mouth with water. Remove dentures if any. Move exposed person to fresh air. Keep person warm and at rest. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention if symptoms occur. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

**Notes to Physician** : Not available.

## Section 5. Fire fighting measures

**Flammability of the product** : Non-flammable.

**Auto-ignition Temperature** : Not applicable.

**Flash Points** : Not applicable.

**Flammable limits** : Not applicable.

**Products of combustion** : Not applicable.

**Fire hazards in presence of various substances** : Not available.

**Explosion hazards in presence of various substances** : Not available.

**Fire fighting media and instructions** : Use an extinguishing agent suitable for the surrounding fire.

Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.

In a fire or if heated, a pressure increase will occur and the container may burst.

**Special protective equipment for fire-fighters** : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

**Special remarks on fire hazards** : Not available.

**Special remarks on explosion hazards** : Not available.

## Section 6. Accidental release measures

**Personal precautions** : No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment (see section 8).

**Environmental precautions** : Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

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**Methods for cleaning up** : Stop leak if without risk. Move containers from spill area. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see section 13). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Note: see section 1 for emergency contact information and section 13 for waste disposal.

## Section 7. Handling and storage

**Handling** : Put on appropriate personal protective equipment (see section 8). 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. Do not ingest. Avoid contact with eyes, skin and clothing. Avoid breathing vapor or mist. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container.

**Storage** : Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.

## Section 8. Exposure Controls, Personal Protection

**Engineering controls** : No special ventilation requirements.

**Personal protection**

**Eyes** : Recommended: safety glasses with side shields

**Skin** : Recommended: Work uniform or laboratory coat.

**Respiratory** : Recommended: A respirator is not needed under normal and intended conditions of product use.

**Hands** : >8 hours (breakthrough time): Butyl rubber gloves.

**Other protection** : Not available.

**Personal protective equipment (Pictograms)** :

**Personal protection in case of a large spill** : Splash goggles. Full suit. Boots. Gloves. Suggested protective clothing might not be sufficient; consult a specialist BEFORE handling this product.

**Consult local authorities for acceptable exposure limits.**

## Section 9. Physical and chemical properties

**Physical State and Appearance** : Liquid.

**Color** : Hazy Yellow. (Light.)

**Odor** : Characteristic.

**pH** : 4.2 (Conc. (% w/w): 100) [Acidic.]

**Relative density** : 1.013 g/cm3 (20°C / 68°F)

**Viscosity** : Not available.

**Solubility** : Soluble in the following materials: methanol, diethyl ether, acetone.
Partially soluble in the following materials: cold water, hot water.

**Flash point** : Not applicable.

**Explosive properties** : Not available.

**Oxidizing properties** : Not applicable

**Physical chemical comments** : Not available.

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## Section 10. Stability and reactivity

**Stability and Reactivity** : The product is stable.

**Conditions of instability** : Stable under recommended storage and handling conditions (see section 7).

**Incompatibility with various substances** : Reactive with alkalis.

**Hazardous Decomposition Products** : Not available.

**Hazardous polymerization** : Will not occur.

## Section 11. Toxicological information

| | | | | |
|---|---|---|---|---|
| N-Methyl-2-pyrrolidone | LD50 | 3914 mg/kg | Oral | Rat |
| | LD50 | 5130 mg/kg | Oral | Mouse |
| Acetic acid | LD50 | 3310 mg/kg | Oral | Rat |
| | LDLo | 600 mg/kg | Oral | Rabbit |
| poly(oxy-1,2-ethanediyl), .alpha.-hydro-.omega.-hydroxy-, ether with .alpha.-fluoro-.omega.-(2-hydroxyethyl)poly(difluoromethylene) (1:1) | LD50 | 17000 mg/kg | Oral | Rat |
| propan-2-ol | LD50 | 5045 mg/kg | Oral | Rat |
| | LD50 | 6410 mg/kg | Oral | Rabbit |
| | LD50 | 3600 mg/kg | Oral | Mouse |
| | LD50 | 12800 mg/kg | Dermal | Rabbit |
| | LD50 | 12800 mg/kg | Dermal | Rabbit |
| | LDLo | 1537 mg/kg | Oral | Dog |
| | LDLo | 3570 mg/kg | Oral | human |
| | LDLo | 5272 mg/kg | Oral | man |
| 1,3-Dioxolane | LD50 | 5200 mg/kg | Oral | Rabbit |
| | LD50 | 3200 mg/kg | Oral | Mouse |
| | LD50 | 3000 mg/kg | Oral | Rat |

:

**Chronic effects on humans** : Not available.

**Other toxic effects on humans** : Non-irritant for skin. Non-irritating to the eyes.

**Special remarks on toxicity to animals** : Not available.

**Special remarks on chronic effects on humans** : Not available.

**Special remarks on other toxic effects on humans** : Not available.

**Specific effects**

**Carcinogenic effects** : No known significant effects or critical hazards.

**Mutagenic effects** : No known significant effects or critical hazards.

**Reproduction toxicity** : No known significant effects or critical hazards.

## Section 12. Ecological information

| | | | |
|---|---|---|---|
| N-Methyl-2-pyrrolidone | LEUCISCUS IDUS (LC50) | 96 hour(s) | 4000 mg/l |
| | Daphnia (LC50) | 24 hour(s) | >1000 mg/l |
| | Algae (LC50) | 72 hour(s) | >500 mg/l |
| propan-2-ol | FATHEAD MINNOWS (EC50) | 96 hour(s) | 6550 mg/l |
| | Lepomis macrochirus (LC50) | 96 hour(s) | >1400 mg/l |
| | Pimephales promelas (LC50) | 96 hour(s) | 6550 mg/l |
| | Pimephales promelas (LC50) | 96 hour(s) | 9640 mg/l |
| | Pimephales promelas (LC50) | 96 hour(s) | 10400 mg/l |
| | Pimephales promelas (LC50) | 96 hour(s) | 11130 mg/l |
| Acetic acid | Daphnia magna (EC50) | 48 hour(s) | 65 mg/l |
| | Lepomis macrochirus (LC50) | 96 hour(s) | 75 mg/l |

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| | | |
|---|---|---|
| Pimephales promelas (LC50) | 96 hour(s) | 79 mg/l |
| Pimephales promelas (LC50) | 96 hour(s) | 88 mg/l |

**BOD and COD** : Not available.

**Biodegradable/OECD** : Not available.

**Mobility** : Not available.

**Products of degradation** : Decomposition products may include the following materials: carbon oxides (CO, $CO_2$) and water, nitrogen oxides (NO, $NO_2$...).

**Toxicity of the products of biodegradation** : The product itself and its products of degradation are not toxic.

**Special remarks on the products of biodegradation** : Not available.

## Section 13. Disposal considerations

**Waste information** : The generation of waste should be avoided or minimized wherever possible. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. 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. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

**Waste stream** : Not available.

**Consult your local or regional authorities.**

## Section 14. Transport information

| Regulatory Information | UN number | Proper shipping name | Class | Packing group | Label | Additional information |
|---|---|---|---|---|---|---|
| DOT Classification | Not regulated. | - | - | - | | Keep in frostfree area |
| TDG Classification | Not regulated. | - | - | - | | Keep in frostfree area |
| ADR/RID Class | Not regulated. | - | - | - | | **Remarks** Keep in frostfree area |
| IMDG Class | Not regulated. | - | - | - | | **Remarks** Keep in frostfree area |
| IATA-DGR Class | Not regulated. | - | - | - | | **Remarks** Keep in frostfree area |

## Section 15. Regulatory information

**WHMIS (Canada)** : Not controlled under WHMIS (Canada).
No products were found.

**International regulations**

**EINECS** : Not available.

**DSCL (EEC)** : This product is not classified according to the EU regulations.

**International lists** : **Australia inventory (AICS):** Not determined.
**China inventory (IECSC):** Not determined.
**Korea inventory (KECI):** Not determined.
**Philippines inventory (PICCS):** Not determined.
**Japan inventory (ENCS):** Not determined.

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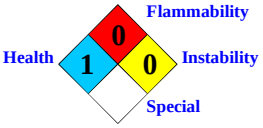
## Section 16. Other information

**Label Requirements** : NOT EXPECTED TO PRODUCE SIGNIFICANT ADVERSE HEALTH EFFECTS WHEN THE RECOMMENDED INSTRUCTIONS FOR USE ARE FOLLOWED.

**Hazardous Material Information System (U.S.A.)**

| | |
|---|---|
| Health | 1 |
| Fire hazard | 0 |
| Reactivity | 0 |
| Personal protection | C |

**National Fire Protection Association (U.S.A.)**




**References** : Not available.

**Other special considerations** : Not available.

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**Notice to reader**

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**Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.**