Safety data for hazardous substances and preparations according to EC regulation 1907/2006/EEC (REACH)

| | <u> </u> | |
|--------------------------------|---|---|
| Revis | ision Date 07/01/2020 | Print Date 07/01/2020 |
| 1. | Substance/description | n of preparation and company |
| | de name: | |
| | aning fluid for CD disc (Formula#1 | 3) |
| 1.1 description of preparation | | Delict 0 |
| | Mixture of substances listed belo producer/supplier Ta | iwan Bor Ying Corp. |
| | | b.61, Lane 369, Kimmen St. Pan Chiao District, |
| | | DC – 22071 New Taipei City |
| | | 886-2-2681-5456 |
| | | 886-2-2682-6590 |
| 1.2 | responsible department: de | pt. Chemicals |
| 2. | Harzard identification | / Possible dangers |
| 2.1 | description of dangers: inflammable | |
| 2.2 | special information on danger | |
| 2.3 | Classification of the substance | |
| | • | gulation (EC)1727/2008 [CLP/GHS] |
| | Flam. Liq. 3, H226 Eye Irrit. 2, H319 | |
| | STOT SE 3, H336 | |
| 2.4 | Classification according to dir | ective 67/548/EEC [DSD] |
| | F; R10 | |
| | Xi; R36 | |
| | R67 | Linformation on boolth offents and summtanes |
| 2.5 | Label elements: | I information on health effects and symptoms. |
| 2.5 | Hazard pictograms : | |
| | | |
| | \wedge | |
| | | |
| | | |
| | | |
| | Signal word : Danger Hazard statements : | |
| | | our. Causes serious eye irritation. May cause drowsiness or |
| | dizziness. | our. Causes serious eye irritation. May cause drowsmess of |
| | Precautionary statements | |
| | Prevention : | |
| | | e or face protection. Keep away from heat, sparks, open |
| | | noking. Use explosion-proof electrical, |
| | | ial-handling equipment. Use only non-sparking |
| | tools. Lake precautionary measu | res against static discharge. Keep container tightly |

closed. Use only outdoors or in a well-ventilated area. Avoid breathing vapour. Wash hands thoroughly after handling.

Response :

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or physician if you feel unwell.

IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower.

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

If eye irritation persists: Get medical attention.

Storage :

Store locked up. Store in a well-ventilated place. Keep cool.

Disposal :

Dispose of contents and container in accordance with all local, regional, national and international regulations.

3. Composition / information on components of preparation general characterisation 3.1 solvent 3.2 hazardous components description CAS No. weight - % symbol R-sent. CLP (GHS) F 67-63-0 Propan-2-ol 20 10-36-67 H319, H336, H225 4. First aid measures 4.1 general information remove affected person from dangerous area and lay down. remove clothes touched by the product. supply fresh air or oxygen 4.2 inhaling supply fresh air or oxygen Consult emergency doctor if complaints are permanent. in case of unconsciousness use stable lateral-position for transport. 4.3 skin contact wash off with water and soap immediately and rinse thorougly. in case of permanent skin irritation consult doctor. 4.4 eve contact rinse open eyes under running water for various minutes. Consult doctor. 4.5 swallowing rinse out mouth and drink water afterwards, do not provoke vomiting and consult a doctor immediately. information for the doctor 4.6 danger of aspiration when swallowing or vomiting. 5. **Firefighting measures** suitable extinguishing agents: 5.1 CO2, firefighting powder or spray jetted water. Fight larger fires with spray jetted water or alcohol resistant foam. 5.2 extinguishing agents not suitable for safety reasons: fully jetted water special dangers caused by the material or the preparation, its combustion product or 5.3 developing gases: development of explosive air-gas mixtures possible. carbon monoxide can develop in a fire. special protection equipment for firefighting 5.4 wear breathing apparatus independent from the circulating air. wear a complete protection suit. depending on size of the fire, coordinate with fire in the surroundings. 5.5 additional information cool endangered containers with sprayed water. Measures for accidental evolution 6. see point 8 + 13. 6.1 personal safety measures: wear protective clothing. Keep unprotected people away. provide for sufficient ventilation. keep away ignition sources. avoid contact with eyes and skin. 6.2 environmental protection measures: do not introduce larger quantities into sewerage system or into waters. inform responsible authorities when sewerage system or waters are affected. inform responsible authorities when soil is affected. 6.3 cleaning methods: take up with liquid-absorbing material (sand, infusorial earth, acid binder, universal binder). provide for sufficient ventilation. dispose contaminated waste material according to point 13.

7. Storage and handling

7.1 handling

7.1.1 information for safe handling:

cool and dry storage in tightly closed Gebinden. provide for good ventilation/suction filter at the workplace. provide for good ventilation at ground level (vapor is heavier than air).

7.1.2 information on protection of fire and explosion:

inflammable liquid. Vapor is heavier than air and can build explosive mixtures with air. Cool endangered containers with water. Keep away ignition sources and do not smoke. take measures against electrostatic charging.

7.2 storage

7.2.1 requirements for storage rooms and containers: store in a cool place. provide for solvent-resistant and tightly closing floor.

7.2.2 information for materials stored together:

seperate storage of inflammable and explosive materials and objects

7.2.3 special storage conditions:

keep container tightly closed. Cool storage. protect from heat and direct sun exposure. heating leads to increased pressure and danger of bursting. store container in a room with good ventilation.

8. Limitations of exposition and personal protection equipment

additional information for the arrangment of technical plants: 8.1 see point 7

8.2 components with limit values that are relevant to the workplace

| CAS-No. | description of material | type | value | unit |
|---------|-------------------------|-----------------|-------|-------------------|
| 67-63-0 | 2-Propanol | MAK | 500 | mg/m ³ |
| | | | 200 | ml/m ³ |
| | | TRGS 900 | 980 | mg/m ³ |
| | | | 400 | mľ/m ³ |

additional information: -

8.3 personal protection equipment

8.3.1 breathing protection:

wear protective mask in case of regular exposure and inappropriate ventilation. aasfilter A 2

8.3.2 hand protection:

wear solvent-resistant protective gloves in case of regular exposure.

8.3.3 eye protection:

wear tight protective glases in case of regular exposure. n.a.

8.3.4 body protection:

8.3.5 general protection and hygiene measures:

take the usual measures for the use of chemicals. take off dirty, soaked clothes. keep away from food, drinks and food stuff. do not eat, drink and smoke at work. wash your hands and use protective skin lotion before breaks and before end of work. avoid eve and skin contact. do not inhale gases / vapors / aerosols.

Physical and chemical properties 9.

9.1 appearance/smell:

| | state: | liquid |
|-----|--------------------------|-------------|
| | color: | transparent |
| | odor: | alcoholic |
| 9.2 | data relevant for safety | |
| | pH value, undilluted: | ≈7,0 |
| | change of state | |

| | boiling point/boiling area (in °C): | 82 | | |
|--|--|--------------|---|---------|
| | melting point/melting area (in °C): | Not availabl | e | |
| | inflammability | | | |
| | flash point (°C): | >=23℃ and | | |
| | ignition temperatur: | Not availabl | e | |
| | fire-fostering properties | | | |
| | danger of explosion: | | ot explosive, but the de r-vapor mixtures is pos | |
| | explosion limits: | | | |
| | lower explotsion limit: | Not availabl | | |
| | upper explosion limit: | Not availabl | | |
| | steam pressure (mbar): | Not availabl | | |
| | density 20°C (g/ cm ³): | Not availabl | e | |
| | solubility | | | |
| | water solubility: | mixable | _ | |
| | viscosity, dyn. (mPa x s): | Not availabl | e | |
| | content of solvent (weight.%) | 100 % | | |
| 10. | Stability and reactivity | | | |
| 10.1 | conditions to be avoided | | | |
| | warmth, flames | | | |
| 10.2 | material to be avoided | | | |
| | reaction with strong oxidizing agents and strong acids. | | | |
| 10.3 | hazardous decomposition produc | | | |
| no hazardous decomposition products known if used as agreed. | | | | |
| 11. | Information concerning toxicology | | | |
| 11.1 | toxicologic tests | | | |
| | accute toxicity | | | |
| | LD_{50} / LC $_{50}$ - values relevant for classification: | | | |
| | component | type | value | species |
| | 2-Propanol | orally | 4570 mg / kg | rat |
| | - P | dermally | 13400 mg / kg | rab |
| | | inhaling | 30 mg / L / 4 h | rat |
| | nrimary irritative effects: | Ŭ | 5 | |

primary irritative effects:

| | primary irritative effects: | |
|------|---|--|
| | on the skin: | light effects |
| | in the eye: | light effects |
| | sensitizing effects: | sensitizing effects possible |
| | subaccute to chronic toxicity: | regular exposure can damage the liver |
| | additional toxicologic information: | |
| | Inhaling of concentrated vapors as well | as oral taking can lead to narcotic conditions. |
| 11.2 | experience with humans: | long or regular contact can extract fat from the skin. |
| | | High concentration can provoke an contact eczema |
| | | |

12. Information on ecology

| information about elimination (persistency and decompositability): easy biological decomposition of the product. | | | |
|---|--------------|--|--|
| 2. behavior in environmental compartiments: N.D.A. | | | |
| 3. ecotoxic effects | | | |
| aqueous toxicity | | | |
| fish toxicity: | 100 mg/l/48h | | |
| LC 50 (leuciscus idus, DIN 38412, part 15) | | | |
| daphnia toxicity: | 100 mg/l/24h | | |
| EC 50 (daphnia magna, DIN 38412, part 11) | | | |
| behavior in sewage plants: | | | |
| disturbances of the decomposition activity of activated sludge cannot be expected if small quantities are correctly introduced into adapted biological sewage plants. | | | |

general information

| hazard category for water: | WGK 1 |
|----------------------------|-------|
| | |

| 13. | Information on disposal | |
|---|---|--|
| 13.1 | product: | - |
| 13.2 | recommendation: | comply with regulations of local authorities. |
| | | do not introduce larger undilluted quantities into |
| | | ground water, sewerage system or into waters. |
| 13.3 | waste key number: | 553 15 |
| | labeling: | methanol and other liquid alcohols |
| 13.4 | for uncleaned packaging: | |
| | | etely. Do not make holes into uncleaned containers, |
| | do not cut or weld them. Remains can | possibly cause an explosion. |
| 14. | Transport regulations | |
| | Transport regulations | |
| 14.1 road- / rail transport (GGVS/ADR / GGVE/RID) | | |
| | class: number / letter: | 3 3b |
| | warning sign - danger - No.: | 3 |
| | material - / UN - No.: | 1987 |
| | description of good | 1987, Alcohols, N.O.S., 2-propanol solution |
| | comment: for regulations concerning re | |
| 14.2 | transport by sea ship(GGVSee / IMI | |
| | class: | 3 |
| | page: | 1987 |
| | packaging group: | III |
| | EmS-No.: | 3-06 |
| | MFAG : | 305 |
| | technically correct name: | ALCOHOLS, N.O.S., 2-propanol solution |
| 14.0 | marine pollutant: | no N DCD \ |
| 14.3 | transport by plane (ICAO - TI / IATA | |
| | class: | 3 |
| | packaging group: technically correct name: | ALCOHOLS, N.O.S., 2-propanol solution |
| | teoninodity concornance. | $\pi_{\rm LOOHOLO}$, N.O.O., 2 -propanol solution |

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 on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles : Not applicable.

Other EU regulations

Europe inventory : This material is listed or exempted. Black List Chemicals : Not listed Priority List Chemicals : Not listed Integrated pollution prevention and control list (IPPC) – Air : Not listed Integrated pollution prevention and control list (IPPC) – Water : Not listed **International regulations** Chemical Weapons Convention List Schedule I Chemicals : Not listed Chemical Weapons Convention List Schedule II Chemicals : Not listed Chemical Weapons Convention List Schedule III Chemicals : Not listed Chemical Weapons Convention List Schedule III Chemicals : Not listed Chemical Safety Assessment : Not available.

16. additional information

15.2

the information refers to the product in its condition on delivery. department issuing data sheet: Dep. Chemicals Procedure used to derive the classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]

Full text of abbreviated H statements:
H226 Flammable liquid and vapour.
H319 Causes serious eye irritation.
H336 May cause drowsiness or dizziness.
Procedure used to derive the classification according to directive 67/548/EEC [DSD]
Full text of abbreviated R phrases:
R10- Flammable.
R36- Irritating to eyes.
R67- Vapours may cause drowsiness and dizziness.
Code letter and hazard designation of product:
F - Highly flammable
Xi - Irritant

Legend:

n.a. = not applicable / n.a. = not available / n.t. = not tested / n.d.a. = no data available / n.c.d. = not called differently

VbF = regulation on inflammable liquids

MAK = maximum concentration at workplace in mg/m3 = ppm

WGK1 = slightly endangering water

Taiwan Bor Ying Corp.

The data listed here is supposed to describe the product with respect to the necessary safety precautions. They do not aim at establishing certain properties, and they are based on the current level of our knowledge. No liability.