SAFETY DATA SHEET



Desloratadine Solid Formulation

| Versio 5.2 | | Revision Date: 2021/04/09 | | S Number: 83-00015 | Date of last issue: 2020/10/02 Date of first issue: 2015/01/23 | | | |
|---------------|---------------------------------------|----------------------------------------------------|-----|---------------------------------------------|-------------------------------------------------------------------|--|--|--|
| 1. PR | 1. PRODUCT AND COMPANY IDENTIFICATION | | | | | | | |
| (| Chemic | al product name | : | Desloratadine So | lid Formulation | | | |
| | •• | r 's company name, a ny name of supplier | | • | umber | | | |
| ŀ | Address | 5 | : | 30 Hudson Street Jersey City, New | t, 33nd floor Jersey, U.S.A 07302 | | | |
| ٦ | Telepho | ne | : | 551-430-6000 | | | | |
| E | E-mail a | ddress | : | EHSSTEWARD@ | 0organon.com | | | |
| E | Emerge | ncy telephone number | · : | 215-631-6999 | | | | |
| - | | mended use of the ch nended use | | cal and restrictio Pharmaceutical | ns on use | | | |

2. HAZARDS IDENTIFICATION

GHS classification of chemical product

| Serious eye damage/eye irri- tation | : | Category 1 |
|-----------------------------------------|---|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Carcinogenicity (Inhalation) | : | Category 2 |
| Reproductive toxicity | : | Category 2 |
| Short-term (acute) aquatic hazard | : | Category 3 |
| Long-term (chronic) aquatic hazard | : | Category 3 |
| GHS label elements Hazard pictograms | : | |
| Signal word | : | Danger |
| Hazard statements | : | H318 Causes serious eye damage. H351 Suspected of causing cancer if inhaled. H361fd Suspected of damaging fertility. Suspected of damag- ing the unborn child. H412 Harmful to aquatic life with long lasting effects. |
| Precautionary statements | : | Prevention: P201 Obtain special instructions before use. |



| Version 5.2 | Revision Date: 2021/04/09 | | | Date of last issue: 2020/10/0 Date of first issue: 2015/01/2 | | | | |
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| | P202 Do not handle until all safety precautions have been read and understood. P273 Avoid release to the environment. P280 Wear protective gloves/ protective clothing/ eye protec- tion/ face protection. | | | | | | | |
| | Response: P305 + P351 + P338 + P310 IF IN EYES: Rinse cautiously water for several minutes. Remove contact lenses, if prese and easy to do. Continue rinsing. Immediately call a POIS CENTER/ doctor. P308 + P313 IF exposed or concerned: Get medical advic attention. | | | | | | | |
| | | 5 | Storage: | | | | | |
| | | F | P405 Store locked | d up. | | | | |
| | | F | Disposal: P501 Dispose of contents/ container to an approved waste disposal plant. | | | | | |
| Othe | r hazards which do not | t result | t in classificatio | n | | | | |
| Impo lines | Important symptoms and out- lines of the emergency as- sumed Sumed Sumed Sumed Sumed Sumed Sumed Sumed Sumed Sumed Sumed Sumed Sumed Sumed Sumed Sumed Sumed Sumed Sumed Sumed Sumed Sumed Sumed Sumed Sumed Sumed Sumed Sumed Sumed Sumed Sumed Sumed Sumed Sumed Sumed Sumed Sumed Sumed Sumed Sumed Sumed Sumed Sumed Sumed Sumed Sumed Sumed Sumed Sumed Sumed Sumed Sumed Sumed Sumed Sumed Sumed Sumed Sumed Sumed Sumed Sumed Sumed Sumed Sumed Sumed Sumed Sumed Sumed Sumed Sumed Sumed Sumed Sumed Sumed Sumed Sumed Sumed Sumed Sumed Sumed Sumed Sumed Sumed Sumed Sumed Sumed Sumed Sumed Sumed Sumed Sumed Sumed Sumed Sumed Sumed Sumed Sumed Sumed Sumed Sumed Sumed Sumed Sumed Sumed Sumed Sumed Sumed Sumed Sumed Sumed Sumed Sumed Sumed Sumed Sumed Sumed Sumed Sumed Sumed Sumed Sumed Sumed Sumed Sumed Sumed Sumed Sumed Sumed Sumed Sumed Sumed Sumed Sumed Sumed Sumed Sumed Sumed Sumed Sumed Sumed Sumed Sumed Sumed Sumed Sumed Sumed Sumed Sumed Sumed Sumed Sumed Sumed Sumed Sumed Sumed Sumed Sumed Sumed Sumed Sumed Sumed Sumed Sumed Sumed Sumed Sumed Sumed Sumed Sumed Sumed Sumed Sumed Sumed Sumed Sumed Sumed Sumed Sumed Sumed Sumed Sumed Sumed Sumed Sumed Sumed Sumed Sumed Sumed Sumed Sumed Sumed Sumed Sumed Sumed Sumed Sumed Sumed Sumed Sumed Sumed Sumed Sumed Sumed Sumed Sumed Sumed Sumed Sumed Sumed Sumed Sumed Sumed Sumed Sumed Sumed Sumed Sumed Sumed Sumed Sumed Sumed Sumed Sumed Sumed Sumed Sumed Sumed Sumed Sumed Sumed Sumed Sumed Sumed Sumed Sumed Sumed Sumed Sumed Sumed Sumed Sumed Sumed Sumed Sumed Sumed Sumed Sumed Sumed Sumed Sumed Sumed Sumed Sumed Sumed Sumed Sumed Sumed Sumed Sumed Sumed Sumed Sumed Sumed Sumed Sumed Sumed Sumed Sumed Sumed Sumed Sumed Sumed Sumed Sumed Sumed Sumed Sumed Sumed Sumed Sumed Sumed Sumed Sumed Sumed Sumed Sumed Sumed Sumed Sumed Sumed Sumed Sumed Sumed Sumed Sumed Sumed Sumed Sumed Sumed Sumed Sumed Sumed Sumed Sumed Sumed Sumed Sumed Sumed Sumed Sumed Sumed Sumed Sumed Sumed Sumed Sumed Sumed Sumed Sumed Sumed Sumed Sumed Sumed Sumed Sumed Sumed Sumed Sumed Sumed Sumed Sumed Sumed | | | | | | | |
| 3. COMPO | OSITION/INFORMATION | | NGREDIENTS | | | | | |
| Subs | tance / Mixture | : M | lixture | | | | | |
| Com | ponents | | | | | | | |
| Cher | nical name | | CAS-No. | Concentration (% w/w) | ENCS No. | | | |
| Cellu | lose | | 9004-34-6 | >= 20 - < 30 | | | | |

| Chemical name | CAS-No. | Concentration (% w/w) | ENCS No. |
|------------------|-------------|-----------------------|---------------|
| Cellulose | 9004-34-6 | >= 20 - < 30 | |
| Desloratadine | 100643-71-8 | >= 3 - < 10 | |
| Talc | 14807-96-6 | >= 1 - < 10 | 1-468 |
| Titanium dioxide | 13463-67-7 | >= 1 - < 10 | 1-558, 5-5225 |
| Propylene glycol | 57-55-6 | >= 0.1 - < 1 | 2-234 |

4. FIRST AID MEASURES

| General advice | : | In the case of accident or if you feel unwell, seek medical ad- vice immediately. When symptoms persist or in all cases of doubt seek medical advice. |
|-------------------------|---|----------------------------------------------------------------------------------------------------------------------------------------------------------------|
| If inhaled | : | If inhaled, remove to fresh air. Get medical attention. |
| In case of skin contact | : | In case of contact, immediately flush skin with soap and plenty of water. |



| Version 5.2 | Revision Date: 2021/04/09 | | Number: 3-00015 | Date of last issue: 2020/10/02 Date of first issue: 2015/01/23 |
|----------------|----------------------------------------------------|----------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| In cas | se of eye contact | G W Th : In fo | et medical attent ash clothing bef horoughly clean case of contact r at least 15 min | ore reuse. shoes before reuse. , immediately flush eyes with plenty of water |
| lf swa | allowed | G : If : G | et medical attent swallowed, DO I et medical attent | tion immediately. NOT induce vomiting. tion. |
| | important symptoms ffects, both acute and ed | : Ca Su Su ur | auses serious ey uspected of caus uspected of dam nborn child. | bughly with water. ye damage. sing cancer if inhaled. haging fertility. Suspected of damaging the can cause mechanical irritation or drying of |
| Prote | Protection of first-aiders | | the skin. First Aid responders should pay attention to self-protect and use the recommended personal protective equipme when the potential for exposure exists (see section 8). | |
| Notes | s to physician | : Tr | eat symptomatio | cally and supportively. |
| 5. FIREFIC | GHTING MEASURES | | | |
| | ble extinguishing media itable extinguishing | Al Ca Di | ater spray cohol-resistant f arbon dioxide (C ry chemical one known. | |
| media | a ific hazards during fire- | cc pc | oncentrations, ar otential dust expl | dust; fine dust dispersed in air in sufficient nd in the presence of an ignition source is a losion hazard. pustion products may be a hazard to health. |
| Haza ucts | rdous combustion prod- | M | arbon oxides etal oxides xides of phospho | orus |
| Speci ods | ific extinguishing meth- | CU Us Re SC | Imstances and the se water spray to emove undamage | measures that are appropriate to local cir- he surrounding environment. o cool unopened containers. ged containers from fire area if it is safe to do |
| for fire | ial protective equipment efighters | : In Us | the event of fire se personal prot | e, wear self-contained breathing apparatus. ective equipment. |

6. ACCIDENTAL RELEASE MEASURES

| Personal precautions, protec- tive equipment and emer- gency procedures | : | Use personal protective equipment. Follow safe handling advice (see section 7) and personal pro- tective equipment recommendations (see section 8). |
|-------------------------------------------------------------------------------|---|-----------------------------------------------------------------------------------------------------------------------------------------------------------|
| Environmental precautions | : | Avoid release to the environment. |

Version



Date of last issue: 2020/10/02

Desloratadine Solid Formulation

SDS Number:

Revision Date:

| 2 | 2021/04/09 | | 983-00015 | Date of first issue: 2015/01/23 | |
|-------------------------------------------------------|----------------------------------------------------------|---|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------|--|
| | | | Retain and dispos | akage or spillage if safe to do so. se of contaminated wash water. should be advised if significant spillages ed. | |
| Methods and materials for containment and cleaning up | | : | Sweep up or vacuum up spillage and collect in suitable tainer for disposal. Avoid dispersal of dust in the air (i.e., clearing dust surf with compressed air). Dust deposits should not be allowed to accumulate on es, as these may form an explosive mixture if they are leased into the atmosphere in sufficient concentration. Local or national regulations may apply to releases and posal of this material, as well as those materials and its employed in the cleanup of releases. You will need to of mine which regulations are applicable. Sections 13 and 15 of this SDS provide information regulation requirements. | | |
| HANDLI | NG AND STORAGE | | | | |
| Handli | ing | | | | |
| Local/ | ical measures Total ventilation e on safe handling | : | causing an explose Provide adequate and bonding, or in Use only with ade Do not breathe du | precautions, such as electrical grounding ert atmospheres. quate ventilation. | |
| | | | Handle in accorda practice, based or sessment Keep container tig Minimize dust ger Keep container cl Keep away from h Take precautiona | or repeated contact with skin. ance with good industrial hygiene and safety in the results of the workplace exposure as- | |
| Avoida | ance of contact | | Oxidizing agents | | |
| | ne measures | : | If exposure to che flushing systems a place. When using do no | mical is likely during typical use, provide ey and safety showers close to the working ot eat, drink or smoke. ed clothing before re-use. | |
| Storag | ge | | | | |
| - | ions for safe storage | : | Keep in properly I Store locked up. Keep tightly close | | |
| | | | Store in accordan | ce with the particular national regulations. | |



| Version 5.2 | Revision Date: 2021/04/09 | SDS Number: 49983-00015 | Date of last issue: 2020/10/02 Date of first issue: 2015/01/23 | | | | | |
|--------------------|------------------------------|----------------------------|-------------------------------------------------------------------|--|--|--|--|--|
| | Strong oxidizing agents | | | | | | | |
| Packaging material | | : Unsuitable ma | terial: None known. | | | | | |

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Threshold limit value and permissible exposure limits for each component in the work environment

| Components | CAS-No. | Value type (Form of | Control parame- ters / Permissible | Basis | |
|------------------|---------------------|-----------------------------------|---------------------------------------|----------|--|
| | | exposure) | concentration | | |
| Cellulose | 9004-34-6 | TŴA | 10 mg/m3 | ACGIH | |
| Desloratadine | 100643-71-8 | TWA | 20 µg/m3 (OEB 3) | Internal | |
| | | Wipe limit | 200 µg/100 cm ² | Internal | |
| Talc | 14807-96-6 | OEL-M | 0.5 mg/m3 | JP OEL | |
| | | (Respirable | - | JSOH | |
| | | dust) | | | |
| | Further information | ation: Class 1 Du | ust | | |
| | | OEL-M (Total | 2 mg/m3 | JP OEL | |
| | | dust) | | JSOH | |
| | Further information | ation: Class 1 Du | ust | | |
| | | TWA (Res- | 2 mg/m3 | ACGIH | |
| | | pirable par- | | | |
| | | ticulate mat- | | | |
| | | ter) | | | |
| Titanium dioxide | 13463-67-7 | OEL-M | 1 mg/m3 | JP OEL | |
| | | (Respirable | (Titanium) | JSOH | |
| | | dust) | | | |
| | Further information | Further information: Class 2 Dust | | | |
| | | OEL-M (Total | 4 mg/m3 | JP OEL | |
| | | dust) | (Titanium) | JSOH | |
| | Further information | ation: Class 2 Du | ust | | |
| | | TWA | 10 mg/m3 | ACGIH | |
| | | | (Titanium dioxide) | | |

| Engineering measures : | Ensure adequate ventilation, especially in confined areas. Minimize workplace exposure concentrations. Apply measures to prevent dust explosions. Ensure that dust-handling systems (such as exhaust ducts, dust collectors, vessels, and processing equipment) are de- signed in a manner to prevent the escape of dust into the work area (i.e., there is no leakage from the equipment). |
|----------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Personal protective equipment | |
| Respiratory protection : | If adequate local exhaust ventilation is not available or expo- sure assessment demonstrates exposures outside the rec- ommended guidelines, use respiratory protection. |
| Filter type : Hand protection | Particulates type |
| Material : | Chemical-resistant gloves |
| Remarks : | Choose gloves to protect hands against chemicals depending |
| | |



| Version 5.2 | Revision Date: 2021/04/09 | SDS Number: 49983-00015 | Date of last issue: 2020/10/02 Date of first issue: 2015/01/23 | | | |
|----------------|------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--|--|
| | | on the concentration and quantity of the hazardous substance and specific to place of work. Breakthrough time i determined for the product. Change gloves often! For sp applications, we recommend clarifying the resistance to chemicals of the aforementioned protective gloves with t glove manufacturer. Wash hands before breaks and at thend of workday. Wear the following personal protective equipment: | | | | |
| Eye protection | | Chemical resis | stant goggles must be worn. e likely to occur, wear: | | | |
| Skin a | and body protection | resistance dat potential. Skin contact n | riate protective clothing based on chemical a and an assessment of the local exposure nust be avoided by using impervious protective es, aprons, boots, etc). | | | |

9. PHYSICAL AND CHEMICAL PROPERTIES

| Physical state | : | powder |
|---------------------------------------------------------------------------------------|---|--------------------------------------------------------------------------------------|
| Colour | : | white |
| Odour | : | No data available |
| Odour Threshold | : | No data available |
| Melting point/freezing point | : | No data available |
| Boiling point, initial boiling point and boiling range | : | No data available |
| Flammability (solid, gas) | : | May form explosive dust-air mixture during processing, han- dling or other means. |
| Flammability (liquids) | : | No data available |
| Lower explosion limit and uppe Upper explosion limit / Upper flammability limit | | xplosion limit / flammability limit No data available |
| Lower explosion limit / Lower flammability limit | : | No data available |
| Flash point | : | No data available |
| Decomposition temperature | : | No data available |
| рН | : | No data available |
| Evaporation rate | : | No data available |
| Auto-ignition temperature | : | No data available |
| Viscosity | | |

SAFETY DATA SHEET



Desloratadine Solid Formulation

| Versio 5.2 | n Revision Date: 2021/04/09 | | S Number: 983-00015 | Date of last issue: 2020/10/02 Date of first issue: 2015/01/23 |
|---------------|---------------------------------------------------|---------|------------------------|-------------------------------------------------------------------|
| | Viscosity, dynamic | : | No data available | 9 |
| | Viscosity, kinematic | : | No data available | |
| So | blubility(ies) Water solubility | : | No data available |) |
| | artition coefficient: n- ctanol/water | : | No data available | |
| Va | apour pressure | : | No data available |) |
| | ensity and / or relative densi elative density | ty : | No data available | |
| De | ensity | : | No data available |) |
| R | elative vapour density | : | No data available |) |
| Ex | plosive properties | : | Not explosive | |
| O | xidizing properties | : | The substance o | r mixture is not classified as oxidizing. |
| М | olecular weight | : | No data available |) |
| | article characteristics article size | : | No data available | 9 |
| 10. ST | ABILITY AND REACTIVITY | (| | |

10. STABILITY AND REACTIVITY

| Reactivity Chemical stability Possibility of hazardous reac- tions | : : | Not classified as a reactivity hazard. Stable under normal conditions. May form explosive dust-air mixture during processing, han- dling or other means. Can react with strong oxidizing agents. |
|-----------------------------------------------------------------------------|-----|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Conditions to avoid | : | Heat, flames and sparks. Avoid dust formation. |
| Incompatible materials | | Oxidizing agents |
| Hazardous decomposition products | : | No hazardous decomposition products are known. |

11. TOXICOLOGICAL INFORMATION

| Information on likely routes of | : | Inhalation |
|---------------------------------|---|--------------|
| exposure | | Skin contact |
| | | Ingestion |
| | | Eye contact |

Acute toxicity

Not classified based on available information.

Product:



| Version 5.2 | Revision Date: 2021/04/09 | SDS Number: 49983-00015 | Date of last issue: 2020/10/02 Date of first issue: 2015/01/23 | | | | |
|----------------|------------------------------|----------------------------------------------------------------------------------|------------------------------------------------------------------------------|--|--|--|--|
| Acute | e oral toxicity | | : Acute toxicity estimate: > 2,000 mg/kg Method: Calculation method | | | | |
| <u>Com</u> | ponents: | | | | | | |
| Cellu | llose: | | | | | | |
| Acute | e oral toxicity | : LD50 (Rat): > | 5,000 mg/kg | | | | |
| Acute | e inhalation toxicity | Exposure time | : LC50 (Rat): > 5.8 mg/l Exposure time: 4 h Test atmosphere: dust/mist | | | | |
| Acute | e dermal toxicity | : LD50 (Rabbit) | : > 2,000 mg/kg | | | | |
| Desl | oratadine: | | | | | | |
| Acute | e oral toxicity | : LD50 (Rat): > | 549 mg/kg | | | | |
| | | LD50 (Mouse) |): 353 mg/kg | | | | |
| | | Symptoms: Vo | y): > 250 mg/kg omiting mortality observed at this dose. | | | | |
| Talc: | | | | | | | |
| Acute | e oral toxicity | : LD50 (Rat): > Remarks: Bas | 5,000 mg/kg ed on data from similar materials | | | | |
| Titar | ium dioxide: | | | | | | |
| Acute | e oral toxicity | : LD50 (Rat): > | 5,000 mg/kg | | | | |
| Acute | e inhalation toxicity | : LC50 (Rat): > Exposure time Test atmosph Assessment: tion toxicity | e: 4 h | | | | |
| Prop | ylene glycol: | | | | | | |
| Acute | e oral toxicity | : LD50 (Rat): > | 5,000 mg/kg | | | | |
| Acute | e inhalation toxicity | : LC50 (Rabbit) Exposure time Test atmosph | e: 4 h | | | | |
| Acute | e dermal toxicity | | : > 2,000 mg/kg The substance or mixture has no acute dermal | | | | |

Skin corrosion/irritation

Not classified based on available information.



| sion | Revision Date: 2021/04/09 | | ast issue: 2020/10/02 first issue: 2015/01/23 |
|-------------------------|----------------------------------------------------------|----------------------------------------------------------------------------------------|--------------------------------------------------|
| <u>Comp</u> | oonents: | | |
| Deslo | oratadine: | | |
| Speci Resul | | : Rabbit : No skin irritation | |
| Talc: | | | |
| Speci Resul | | : Rabbit : No skin irritation | |
| Titani | ium dioxide: | | |
| Speci Resul | | : Rabbit : No skin irritation | |
| Propy | /lene glycol: | | |
| Speci Metho Resul | bd | : Rabbit : OECD Test Guideline 404 : No skin irritation | |
| | us eye damage/eye es serious eye dama <u>c</u> | | |
| | oonents: | | |
| Deslo | oratadine: | | |
| Speci Rema | | : Rabbit : Severe eye irritation | |
| Talc: | | | |
| Speci Resul | | : Rabbit : No eye irritation | |
| Titani | ium dioxide: | | |
| Speci Resul | | : Rabbit : No eye irritation | |
| Propy | /lene glycol: | | |
| Speci Resul Metho | t | Rabbit No eye irritation OECD Test Guideline 405 | |
| Respi | iratory or skin sensi | sation | |
| - | sensitisation | | |

Not classified based on available information.

Respiratory sensitisation

Not classified based on available information.



| | 2021/04/09 | SDS Number: 49983-00015 | Date of first issue: 2015/01/23 |
|----------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Com | oonents: | | |
| | pratadine: | | |
| | | Movimination T | - cat |
| Test T | sure routes | : Maximisation T : Dermal | est |
| Speci | | : Guinea pig | |
| Resul | | : negative | |
| Talc: | | | |
| | sure routes | : Skin contact | |
| Speci | | : Humans | |
| Resul | lt | : negative | |
| | ium dioxide: | | |
| Test | | | ode assay (LLNA) |
| | sure routes | : Skin contact : Mouse | |
| Speci Resul | | : negative | |
| Resul | | . negative | |
| | ylene glycol: | . Mariniantian T | |
| Test T | i ype sure routes | : Maximisation T : Skin contact | est |
| | | | |
| Sneci | 20 | · Guinea nia | |
| | t cell mutagenicity | : Guinea pig : negative | |
| Resul Germ Not cl <u>Comp</u> Cellu | t cell mutagenicity assified based on av conents: | : negative | sterial reverse mutation assay (AMES) |
| Resul Germ Not cl <u>Comp</u> Cellu | t a cell mutagenicity assified based on av <u>ponents:</u> lose: | : negative | cterial reverse mutation assay (AMES) e |
| Resul Germ Not cl <u>Comp</u> Cellu | t a cell mutagenicity assified based on av <u>ponents:</u> lose: | : negative vailable information. : Test Type: Bao Result: negativ | e itro mammalian cell gene mutation test |
| Resul Germ Not cl Comp Cellu Geno | t a cell mutagenicity assified based on av <u>ponents:</u> lose: | : negative vailable information. : Test Type: Bac Result: negativ Test Type: In v Result: negativ | re ritro mammalian cell gene mutation test re mmalian erythrocyte micronucleus test (in viv say) e ute: Ingestion |
| Resul Germ Not cl Comp Cellu Geno | It a cell mutagenicity assified based on av <u>ponents:</u> lose: toxicity in vitro | : negative vailable information. : Test Type: Bac Result: negativ Test Type: In v Result: negativ : Test Type: Man cytogenetic ass Species: Mous Application Ro | re ritro mammalian cell gene mutation test re mmalian erythrocyte micronucleus test (in viv say) e ute: Ingestion |
| Resul Germ Not cl Comr Cellu Geno Geno | It a cell mutagenicity lassified based on av <u>ponents:</u> lose: toxicity in vitro | : negative vailable information. : Test Type: Bac Result: negativ Test Type: In v Result: negativ : Test Type: Man cytogenetic ass Species: Mous Application Ro Result: negativ | re ritro mammalian cell gene mutation test re mmalian erythrocyte micronucleus test (in vir say) e ute: Ingestion re |
| Resul Germ Not cl Comr Cellu Geno Geno | It cell mutagenicity lassified based on av <u>conents:</u> lose: toxicity in vitro toxicity in vivo | : negative vailable information. : Test Type: Bac Result: negativ : Test Type: In v Result: negativ : Test Type: Man cytogenetic ass Species: Mous Application Ro Result: negativ : Test Type: Bac Result: negativ : Test Type: Bac Result: negativ | re ritro mammalian cell gene mutation test re mmalian erythrocyte micronucleus test (in vir say) e ute: Ingestion re cterial reverse mutation assay (AMES) re romosomal aberration luman lymphocytes |



| Version 5.2 | Revision Date: 2021/04/09 | SDS Number: 49983-00015 | Date of last issue: 2020/10/02 Date of first issue: 2015/01/23 |
|----------------|------------------------------|-------------------------------------------------------------|----------------------------------------------------------------------------------|
| | | Species: Mo Cell type: Bo Application Result: nega | one marrow Route: Oral |
| Talc: | | | |
| Geno | toxicity in vitro | | DNA damage and repair, unscheduled DNA syn- mmalian cells (in vitro) ative |
| Geno | toxicity in vivo | Species: Ra | Route: Ingestion |
| Titan | ium dioxide: | | |
| Geno | toxicity in vitro | : Test Type: E Result: nega | Bacterial reverse mutation assay (AMES) ative |
| Geno | toxicity in vivo | : Test Type: I Species: Mo Result: nega | |
| Prop | ylene glycol: | | |
| Geno | toxicity in vitro | : Test Type: E Result: nega | Bacterial reverse mutation assay (AMES) ative |
| Geno | toxicity in vivo | cytogenetic Species: Mo | buse Route: Intraperitoneal injection |

Carcinogenicity

Suspected of causing cancer if inhaled.

Components:

| Species Application Route Exposure time Result | : | Rat Ingestion 72 weeks negative |
|---------------------------------------------------------|---|------------------------------------------|
| Desloratadine: Species Application Route | : | Mouse Oral |
| Exposure time Result | : | 2 Years negative |
| Species Application Route | : | Rat Oral |



| Version 5.2 | Revision Date: 2021/04/09 | SDS Number: 49983-00015 | Date of last issue: 2020/10/02 Date of first issue: 2015/01/23 |
|-------------------------------|-----------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------|
| LOAI Resu Targa Rema | lt et Organs | | v weight from similar materials m or mode of action may not be relevant in |
| Talc: | | | |
| | cation Route sure time | : Mouse : inhalation (dus : 2 Years : negative | st/mist/fume) |
| Titan | ium dioxide: | | |
| | cation Route sure time od It | Rat inhalation (dustring) 2 Years OECD Test Get positive The mechanis humans. | |
| Carci ment | nogenicity - Assess- | : Limited eviden animals. | ce of carcinogenicity in inhalation studies with |
| Spec Appli | ylene glycol: ies cation Route sure time | : Rat : Ingestion : 2 Years | |
| Resu | | : negative | |
| Susp | oductive toxicity ected of damaging fertil ponents: | ity. Suspected of da | maging the unborn child. |
| Cellu | llose: | | |
| Effec | ts on fertility | : Test Type: On Species: Rat Application Ro Result: negativ | |
| Effec ment | ts on foetal develop- | : Test Type: Fe Species: Rat Application Ro Result: negativ | |
| Desl | oratadine: | | |
| Effec | ts on fertility | : Test Type: Fe Species: Rat, Application Ro Fertility: LOAE | male |



| Version 5.2 | Revision Date: 2021/04/09 | SDS Number: 49983-00015 | Date of last issue: 2020/10/02 Date of first issue: 2015/01/23 |
|------------------------------------|---------------------------------|---------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| | | Result: posit | ne mechanism or mode of action may not be rele- |
| | | | t, female AEL: 3 mg/kg body weight No effects on fertility |
| Effects on foetal develop- ment | | Species: Ra Application F Developmen | |
| | | Species: Ra Application F Developmer Symptoms: I Result: Spec | Route: Oral tal Toxicity: LOAEL: 9 mg/kg body weight Preimplantation loss, Reduced body weight ific developmental abnormalities he mechanism or mode of action may not be rele- |
| | | Species: Ra Application F Developmen | |
| Repro sessn | oductive toxicity - As- nent | fertility, base | nce of adverse effects on sexual function and of on animal experiments., Some evidence of cts on development, based on animal experi- |
| Talc: Effect ment | ts on foetal develop- | Species: Ra | Route: Ingestion |
| Prop | ylene glycol: | | |
| | ts on fertility | Species: Mo | Route: Ingestion |
| Effect ment | ts on foetal develop- | Species: Mo | Route: Ingestion |



| Vers 5.2 | sion | Revision Date: 2021/04/09 | | OS Number: 983-00015 | Date of last issue: 2020/10/02 Date of first issue: 2015/01/23 | |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------|----------------------------------------|-----------------------------------------|----------------------------------------------------------------------------------------------|-------------------------------------------------------------------|--|
| STOT - single exposure Not classified based on available information. STOT - repeated exposure Not classified based on available information. Repeated dose toxicity | | | | | | |
| | Components: | | | | | |
| | Celluic Species NOAEL Applica | se: | : : : | Rat >= 9,000 mg/kg Ingestion 90 Days | | |
| | Species LOAEL Applica Exposu | tion Route ire time Organs | | | r observed in testing or mode of action may not be relevant in | |
| | Exposu | - ition Route ire time Organs | | Monkey 6 mg/kg 12 mg/kg Oral 3 Months Central nervous s Gastrointestinal d | | |
| | | - tion Route ıre time | | Monkey 40 mg/kg Oral 17 Months No significant adv | erse effects were reported | |
| | | - ition Route ire time | | Monkey 6 mg/kg Oral 3 Months Gastrointestinal d | isturbance, Fatigue | |
| | Species NOAEL Applica | | : : : : : : : : : : : : : : : : : : : : | Rat 24,000 mg/kg Ingestion 28 Days | | |
| | Specie: NOAEL | | : | Rat 10 mg/m3 | | |



| Vers 5.2 | sion | Revision Date: 2021/04/09 | | DS Number: 983-00015 | Date of last issue: 2020/10/02 Date of first issue: 2015/01/23 |
|-------------|------------------------------------------------------------------------------------|------------------------------|---|-----------------------------------------------|-------------------------------------------------------------------|
| | Application Route Exposure time | | | inhalation (dust/m 2 yr | nist/fume) |
| | Propylene glycol: Species NOAEL Application Route Exposure time | | | Rat, male 1,700 mg/kg Ingestion 2 yr | |
| | Aspiration toxicity Not classified based on availa Experience with human exp | | | | |
| | | onents: atadine: | | | |
| | Inhalat | ion | : | Remarks: May ca | use respiratory tract irritation. |
| | Eye co | ontact | : | Symptoms: Eye i | rritation |
| | Ingesti | on | : | Symptoms: dry m sore throat, painf | outh, muscle pain, Fatigue, Drowsiness, ul menstration |

12. ECOLOGICAL INFORMATION

| Ecotoxicity | | |
|-----------------------------------------------------|---|------------------------------------------------------------------------------------------------------------------------------|
| Components: | | |
| Cellulose: | | |
| Toxicity to fish | : | LC50 (Oryzias latipes (Japanese medaka)): > 100 mg/l Exposure time: 48 h Remarks: Based on data from similar materials |
| Desloratadine: | | |
| Toxicity to fish | : | LC50 (Lepomis macrochirus (Bluegill sunfish)): 9.2 mg/l Exposure time: 96 h Method: FDA 4.11 |
| Toxicity to daphnia and other aquatic invertebrates | : | EC50 (Daphnia magna (Water flea)): 9.6 mg/l Exposure time: 48 h Method: FDA 4.08 |
| Toxicity to algae/aquatic plants | : | EC50 (Pseudokirchneriella subcapitata (green algae)): 1.6 mg/l Exposure time: 72 h Method: OECD Test Guideline 201 |
| | | NOEC (Pseudokirchneriella subcapitata (green algae)): 0.36 mg/l Exposure time: 72 h |



| Version 5.2 | Revision Date: 2021/04/09 | | 983-00015 | Date of last issue: 2020/10/02 Date of first issue: 2015/01/23 |
|----------------|----------------------------------------------------------------------------------------------------------------------------|---|----------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------|
| | | | Method: OECD To | est Guideline 201 |
| | Toxicity to fish (Chronic tox- icity) Toxicity to daphnia and other aquatic invertebrates (Chron- ic toxicity) | | NOEC (Pimephale Exposure time: 32 Method: OECD Te | |
| aqı | | | : NOEC (Daphnia magna (Water flea)): 0.48 mg/l Exposure time: 21 d Method: OECD Test Guideline 211 | |
| То | Toxicity to microorganisms | | EC50 (Natural mid Exposure time: 3 Test Type: Respir Method: OECD To | ation inhibition |
| | | | NOEC (Natural m Exposure time: 3 Test Type: Respir Method: OECD To | ation inhibition |
| Tal | c: | | | |
| | kicity to fish | : | LC50 (Brachydan Exposure time: 24 | io rerio (zebrafish)): > 100,000 mg/l 1 h |
| Tita | Titanium dioxide: | | | |
| То | kicity to fish | : | LC50 (Oncorhync Exposure time: 96 Method: OECD Te | |
| | kicity to daphnia and other uatic invertebrates | : | EC50 (Daphnia m Exposure time: 48 | nagna (Water flea)): > 100 mg/l 3 h |
| To» pla | kicity to algae/aquatic nts | : | EC50 (Skeletoner Exposure time: 72 | ma costatum (marine diatom)): > 10,000 mg/l 2 h |
| То | kicity to microorganisms | : | EC50: > 1,000 mg Exposure time: 3 Method: OECD Te | ĥ |
| Pro | opylene glycol: | | | |
| | kicity to fish | : | LC50 (Oncorhync Exposure time: 96 | hus mykiss (rainbow trout)): 40,613 mg/l 5 h |
| | kicity to daphnia and other uatic invertebrates | : | EC50 (Ceriodaph Exposure time: 48 | nia dubia (water flea)): 18,340 mg/l 3 h |
| To» pla | kicity to algae/aquatic nts | : | ErC50 (Skeletone Exposure time: 72 Method: OECD Te | |
| aqı | kicity to daphnia and other uatic invertebrates (Chron- oxicity) | : | NOEC (Ceriodapł Exposure time: 7 | nnia dubia (water flea)): 13,020 mg/l d |



| rsion | Revision Date: 2021/04/09 | | 0S Number: 983-00015 | Date of last issue: 2020/10/02 Date of first issue: 2015/01/23 | |
|------------|------------------------------------------------------------------------------|-----|--------------------------------------------------------------------------------|-------------------------------------------------------------------|--|
| Toxic | Toxicity to microorganisms Persistence and degradabil Components: Cellulose: | | : NOEC (Pseudomonas putida): > 20,000 mg/l Exposure time: 18 h | | |
| Persi | | | | | |
| <u>Com</u> | | | | | |
| Cellu | | | | | |
| Biode | egradability | : | Result: Readily bi | iodegradable. | |
| Deslo | oratadine: | | | | |
| Biode | egradability | : | Result: Not readil Biodegradation: Exposure time: 28 Method: OECD T | 67.4 % | |
| | | | Result: Not readil Biodegradation: Exposure time: 28 Method: FDA 3.1 | 0 % 8 d | |
| Stabi | lity in water | : | Hydrolysis: < 10 % Method: FDA 3.0 | | |
| Prop | ylene glycol: | | | | |
| | egradability | : | Result: Readily bi Biodegradation: 9 Exposure time: 28 Method: OECD T | 98.3 % | |
| Bioad | ccumulative potential | | | | |
| <u>Com</u> | ponents: | | | | |
| Deslo | oratadine: | | | | |
| | ion coefficient: n- ol/water | : | log Pow: 1.24 Method: OECD T | est Guideline 107 | |
| Partit | ylene glycol: ion coefficient: n- ol/water | : | log Pow: -1.07 | | |
| Mobi | lity in soil | | | | |
| Com | ponents: | | | | |
| Deslo | oratadine: | | | | |
| | bution among environ- al compartments | : | | est Guideline 106 | |
| | rdous to the ozone lay | ver | | | |



| Version 5.2 | Revision Date: 2021/04/09 | SDS Number: 49983-00015 | Date of last issue: 2020/10/02 Date of first issue: 2015/01/23 |
|----------------|---------------------------------------------------|---------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------|
| | r adverse effects ata available | | |
| 13. DISPO | SAL CONSIDERATIO | ONS | |
| Disp | osal methods | | |
| | e from residues aminated packaging | : Empty containe dling site for re | ccordance with local regulations. ers should be taken to an approved waste ha cycling or disposal. e specified: Dispose of as unused product. |
| 14. TRAN | SPORT INFORMATIO | N | |
| Inter | national Regulations | | |
| UNR Not re | TDG egulated as a dangerou | us good | |
| | -DGR egulated as a dangero | us good | |
| - | G-Code egulated as a dangerou | ns good | |
| | sport in bulk accordin pplicable for product a | - | RPOL 73/78 and the IBC Code |
| | onal Regulations to section 15 for spec | ific national regulation | |
| 15. REGU | | ON | |
| Relat | ed Regulations | | |
| Fire | Service Law | s materials / designate | ed flammables. |
| | nical Substance Cont | | |
| | ty Assessment Chemic mical name | al Substance | Number |
| - | ane-1,2-diol | | 106 |
| Indus | strial Safety and Heal | th Law | |
| Harm | nful Substances Proh | ibited from Manufac | ture |
| Not a | pplicable | | |
| | n ful Substances Requ pplicable | ired Permission for | Manufacture |
| Subs | tances Prevented Fro | om Impairment of He | alth |

Substances Prevented From Impairment of Health

Not applicable

Circular concerning Information on Chemicals having Mutagenicity - Annex 2: Information on Existing Chemicals having Mutagenicity Not applicable



| rsion 2 | Revision Date: 2021/04/09 | SDS Number: 49983-00015 | Date of last issue: 2 Date of first issue: 2 | |
|------------|-----------------------------------------------------|-------------------------------------------|-----------------------------------------------------|------------------------|
| on No | | rmation on Chemica naving Mutagenicity | als having Mutagenicity | - Annex 1: Informatior |
| Subs | tances Subject to b | e Notified Names | | |
| | e 57-2 (Enforcement | | | |
| | nical name | | Number | Concentration (%) |
| Titan | ium(IV) oxide | | 191 | >=1 - <10 |
| Subs | tances Subject to b | e Indicated Names | | |
| Article | e 57 (Enforcement O | rder Article 18) | | |
| | nical name | i. | | Number |
| Titan | ium(IV) oxide | | | 191 |
| Ordin | pplicable ance on Preventior pplicable | n of Lead Poisoning | | |
| | ance on Preventior | n of Tetraalkyl Lead | Poisoning | |
| | ance on Preventior | n of Organic Solven | t Poisoning | |
| | cement Order of the tances) | e Industrial Safety a | Ind Health Law - Attache | d table 1 (Dangerous |
| Not a | pplicable | | | |
| Poisc | onous and Deleterio | us Substances Con | trol Law | |
| Not a | pplicable | | | |
| | | | ts of Specific Chemical S to the Management Ther | |
| Not a | pplicable | | | |
| - | Pressure Gas Safet | y Act | | |
| • | psive Control Law | | | |
| Vess | el Safety Law egulated as a danger | | | |
| | | | | |
| | ion Law egulated as a danger | ous good | | |
| Marin | e Pollution and Sea | a Disaster Preventio | on etc Law | |
| Bulk t | ransportation | : Noxious liqui | id substance(Category Z) | |
| Pack | transportation | : Not classified | d as marine pollutant | |
| | otics and Psychotro | | | |
| Narco | sites and responded | | | |



| Version 5.2 | Revision Date: 2021/04/09 | SDS Number: 49983-00015 | Date of last issue: 2020/10/02 Date of first issue: 2015/01/23 |
|----------------|----------------------------------------------|----------------------------|-------------------------------------------------------------------|
| | ecific Narcotic or Psychotro t applicable | opic Raw Material (Exp | port / Import permission) |
| | aste Disposal and Public dustrial waste | Cleansing Law | |
| Th | e components of this pro | oduct are reported in | the following inventories: |
| AIC | CS | : not determined | |
| DS | SL | : not determined | |
| IEC | CSC | : not determined | |
| | | | |
| 16. OTH | HER INFORMATION | | |

| Further information | |
|---------------------|--|
|---------------------|--|

| Sources of key data used to compile the Safety Data Sheet | : | Internal technical data, data from raw material SDSs, OECD eChem Portal search results and European Chemicals Agen- cy, http://echa.europa.eu/ | | | | |
|-----------------------------------------------------------------|---|------------------------------------------------------------------------------------------------------------------------------------------------------|--|--|--|--|
| Date format | : | yyyy/mm/dd | | | | |
| Full text of other abbreviations | | | | | | |
| ACGIH JP OEL JSOH | : | USA. ACGIH Threshold Limit Values (TLV) Japan. The Japan Society for Occupational Health. Recom- mendation of Occupational Exposure Limits | | | | |
| ACGIH / TWA JP OEL JSOH / OEL-M | : | 8-hour, time-weighted average Occupational Exposure Limit-Mean | | | | |

AIIC - Australian Inventory of Industrial Chemicals; ANTT - National Agency for Transport by Land of Brazil; ASTM - American Society for the Testing of Materials; bw - Body weight; CMR -Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DSL - Domestic Substances List (Canada); ECx - Concentration associated with x% response; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response; ERG - Emergency Response Guide; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization; KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; n.o.s. - Not Otherwise Specified; Nch - Chilean Norm; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NOM - Official Mexican Norm; NTP - National Toxicology Program; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evalua-



| Version | Revision Date: | SDS Number: | Date of last issue: 2020/10/02 |
|---------|----------------|-------------|---------------------------------|
| 5.2 | 2021/04/09 | 49983-00015 | Date of first issue: 2015/01/23 |

tion, Authorisation and Restriction of Chemicals; SADT - Self-Accelerating Decomposition Temperature; SDS - Safety Data Sheet; TCSI - Taiwan Chemical Substance Inventory; TDG - Transportation of Dangerous Goods; TSCA - Toxic Substances Control Act (United States); UN - United Nations; UNRTDG - United Nations Recommendations on the Transport of Dangerous Goods; vPvB - Very Persistent and Very Bioaccumulative; WHMIS - Workplace Hazardous Materials Information System

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 is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and shall not be considered a warranty or quality specification of any type. The information provided relates only to the specific material identified at the top of this SDS and may not be valid when the SDS material is used in combination with any other materials or in any process, unless specified in the text. Material users should review the information and recommendations in the specific context of their intended manner of handling, use, processing and storage, including an assessment of the appropriateness of the SDS material in the user's end product, if applicable.

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