Exposure Assessment Worksheet

Table of Contents

|  |  |
| --- | --- |
|  |  |
| Chemical Name: | Calcium carbonate |
| [CAS number](http://toxnet.nlm.nih.gov/index.html): | 471-34-1 |
| Review Type: |  |
| Nomination Info (who/when/why) | For CECs, refer to [nominations tracking table](%22\AA\ORD\ORD\Data\ESA\ESA_Units_Programs\HRA\Guidance\Water\Screening\Nominations%22) (link is under “Date of Nomination.”) Chemical status is in the [Chemical tracking Table](%22\AA\ORD\ORD\Data\ESA\ESA_Units_Programs\HRA\Admin\Tracking\ChemicalProjectTracking%22). |
| Exposure Score | -1 |

|  |  |
| --- | --- |
| Some useful Links |  |
| General | [PubMed (NIH/NLM)](http://www.ncbi.nlm.nih.gov/pubmed/)(search for journal articles) [Google Scholar](https://scholar.google.com/) (search for journal articles) [EPA CompTox Chemistry Dashboard](https://comptox.epa.gov/dashboard/)—Fate/transport, exposure estimates, chemical uses, and more [PubChem](https://pubchem.ncbi.nlm.nih.gov/) (chemical data) [ATSDR](http://www.atsdr.cdc.gov/) (Tox profiles, often include exposure information as well) [TOXNET](http://toxnet.nlm.nih.gov/index.html) (Chemical data; go to HSDB for chemical properties and related info.) [EPA Clu-In fact sheets and info](https://clu-in.org/) [EPA Federal Facility Contaminant Fact Sheets](https://www.epa.gov/fedfac/emerging-contaminants-and-federal-facility-contaminants-concern#706) |
| Physical/Chemical properties | [TOXNET](http://toxnet.nlm.nih.gov/index.html) (Chemical data; go to HSDB for chemical properties and related info.) [NLM ChemID Plus](http://chem.sis.nlm.nih.gov/chemidplus/) (good for chemical identity and properties) |
| Chemical use | [Pesticide registration status and documentation](http://www.epa.gov/opp00001/reregistration/status.htm) [Pharmaceutical label information](http://dailymed.nlm.nih.gov/dailymed/about.cfm) [Food additives](https://www.accessdata.fda.gov/scripts/fdcc/?set=FoodSubstances) [Cosmetics and Fragrances](http://www.cir-safety.org/) Fragrance assessments: [Food & Chemical Toxicology Fragrance Material Safety Assessment Center](http://fragrancematerialsafetyresource.elsevier.com/) |
| Exposure Informati | on [USDA Pesticide Data Program](http://www.ams.usda.gov/AMSv1.0/pdp) (PDP) (pesticide data, including food residues) |
| Monitoring Data | *General (also see section 4)*: [Occurrence studies by USGS and others](%22O:\ESA\ESA_Units_Programs\HRA\Resources\ExposureOccurenceReports%22) *Pharmaceuticals*: [NOAA](http://products.coastalscience.noaa.gov/peiar/) – monitoring of pharmaceuticals in the environment *Pesticides*: [MDA monitoring and Assessment of Agricultural Chemicals in the Environment](https://www.mda.state.mn.us/pesticide-fertilizer/monitoring-assessment-agricultural-chemicals-environment) (including annual monitoring reports) |
| Release Informatio | n [EPA Toxics Release Inventory](http://www.epa.gov/triexplorer/) (industrial chemical releases) NOTE (Jan 2019) the popup window for selecting chemicals is glitchy. Only Firefox opened the window properly (regardless of popup settings) and it was necessary to reload the URL inside the popup top make the selection function work. |

# Missing DTXSID from Input: 0

|  |  |  |
| --- | --- | --- |
| DTXSID | CAS | chemName |
| NA | NA | NA |

# No PUC Assigned for DTXSID from Input: 1

|  |  |  |
| --- | --- | --- |
| DTXSID | CAS | chemName |
| DTXSID6023947 | 75-15-0 | Carbon disulfide |

## 1. Chemical Use

|  |  |
| --- | --- |
| Chemical Synonyms | Place Holder |
| Chemical Uses | NA |
| Reported functional uses | Abrasive; ANTIMICROBIAL; binder; BUFFERING; BULKING; carrier; COLORANT; COSMETICCOLORANT; EXTENDER; FILLER; Fillers/Fibers; Impact Modifiers; OPACIFYING; ORALCARE; Processing Aids - Additives; Rheology ; RHEOLOGY MODIFIER; Rheology Modifiers / Thickeners; THICKENER; VISCOSITY MODIFIER |
| List of CPCat terms (general uses) | NA |
| Production Data | Place Holder |
| Key messages for Information Sheet | Place Holder |
| Potential Issues/Concerns or Unresolved Questions | Place Holder |
| Secondary Reviewer questions/observations | (note any disagreements/additions/corrections) |

## 2. Chemical Data

|  |  |
| --- | --- |
| Koc (log) | Place Holder |
| Biodegradation half-life | Place Holder |
| Soil/Water/Sed. half-life | Place Holder |
| Solubility in Water | Place Holder |
| Henry’s Law const. | Place Holder |
| WWTP removal | Place Holder |
| Molecular Weight | Place Holder |
| Vapor Pressure | NaN |
| Kow | Place Holder |
| BCF | Place Holder |
| Breakdown Products | Place Holder |
| Key messages for Information Sheet | Place Holder |
| Potential Issues/Concerns or Unresolved Questions | Place Holder |
| Secondary Reviewer questions/observations | (note any disagreements/additions/corrections) |

## 3. Chemical Emissions and Disposal

|  |  |
| --- | --- |
| Wastewater Concentration | Place Holder |
| Down-the-Drain Disposal | Place Holder |
| Landfill Disposal | Place Holder |
| Pesticide/fertilizer Releases to Land | Place Holder |
| Pesticide/fertilizer Releases to Water | Place Holder |
| Industrial Releases to Water | Place Holder |

## 4. Chemical Occurrence in Environment, Drinking Water, and Food

|  |  |
| --- | --- |
| Detected in Drinking Water in Minnesota | Place Holder |
| Detected in Drinking Water Outside Minnesota | Place Holder |
| Pretreatment Source Water (Groundwater or Surface) in Minnesota | Place Holder |
| Pretreatment Source Water (Groundwater or Surface) Outside Minnesota | Place Holder |
| Non-Source Surface Water in Minnesota | Place Holder |
| Non-Source Surface Water Outside Minnesota | Place Holder |
| Non-Source Ground Water in Minnesota | Place Holder |
| Non-Source Ground Water Outside Minnesota | Place Holder |
| USGS Tier (Water) | Place Holder |
| USGS Tier (Sediment) | Place Holder |
| Minnesota Groundwater | Place Holder |
| Air and Dust | No |
| Food | Place Holder |
| Soil/Sediment | Yes, (20) |
| Sludge/Biosolids | Place Holder |
| Key messages for Information Sheet | Place Holder |
| Potential Issues/Concerns or Unresolved Questions | Place Holder |
| Secondary Reviewer questions/observations | Place Holder |

## 5. Human Exposure

|  |  |
| --- | --- |
| Presence in Consumer Products | Place Holder |
| Individual direct exposure potential - Consumer Products | Place Holder |
| Present in food or drinking water | Place Holder |
| Individual exposure potential - Food/Drinking Water | Place Holder |
| General population (non-occupational) exposure measurements | Place Holder |
| Tested in the human body? (blood, urine, etc.) | Place Holder |
| Has Dermal exposure been measured or estimated? | Place Holder |
| Has Inhalation exposure been measured or estimated? | Place Holder |
| Has Drinking Water exposure been measured or estimated? | Place Holder |
| Has Food exposure been measured or estimated? | Place Holder |
| Has Incidental Ingestion been measured or estimated? | Place Holder |
| Have average daily doses been estimated? | Place Holder |
| Relative Source Contribution | (This section is completed during full review, not during screening.) |
| Are there any populations (children, elderly, etc.) who are a special concern for this chemical? | Place Holder |
| Key messages for Information Sheet | Place Holder |
| Secondary Reviewer questions/observations | (note any disagreements/additions/corrections) |

## 6. Review History and Contacts

|  |  |
| --- | --- |
| Screening Reviewer, Date | Place Holder |
| Primary Reviewer, Date | Place Holder |
| Secondary Reviewer, Date | Place Holder |
| MDH staff with an interest in this chemical | (for example: staff from infectious disease, staff who deal with pesticide application issues, staff who may be involved with public messages about this chemical. Not necessarily people we are asking for information) |
| MDH and other state agency staff with information on this chemical | (list individuals who may have information to contribute) |
| Other state agencies to be contacted | (list state agencies that may need to be kept informed of this review. For example, MPCA, MDA) |
| Potential MDH actions for this chemical | For example: recommend addition to CCL4 list; send comments to EPA; advise MPCA on potential exposure; recommend sampling by MDH; offer advice to public on how to reduce impacts or personal exposure; etc.) |
| Record of contacts | (keep a list of correspondence, items that need follow-up, questions asked, etc.) |

# References

# Supplemental Tables

## Chemical Data

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| product\_name | general\_category | product\_type | DTXSID | minimum\_weight\_fraction | maximum\_weight\_fraction |
| NA | NA | NA | DTXSID3036238 | NA | NA |

## Data Sources by CPCat Term

TABLE TBD!

## Detection by Source

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| DTXSID | name | harmonized\_medium | reported\_species | nProducts | detected |
| DTXSID3036238 | usgs\_groundwater | surface water | NA | 0 | 25 |
| DTXSID3036238 | usgs\_groundwater | surface water | NA | 0 | 50 |
| DTXSID3036238 | usgs\_sediment | sediment | NA | 0 | 4 |
| DTXSID3036238 | usgs\_sediment | sediment | NA | 0 | 8 |
| DTXSID3036238 | usgs\_surfacewater | groundwater | NA | 0 | 10 |
| DTXSID3036238 | usgs\_surfacewater | surface water | NA | 0 | 70 |
| DTXSID3036238 | usgs\_surfacewater | groundwater | NA | 0 | 20 |
| DTXSID3036238 | usgs\_surfacewater | surface water | NA | 0 | 140 |