

Safety Data Sheet

Printing date 02/17/2016

Version Number 1.1

Reviewed on 02/08/2016

1 Identification

Product identifier

Trade name: ***DARASET 400***

SDS ID Number: 60044

Relevant identified uses of the substance or mixture, and uses advised against
Specialty construction product. Not intended for other uses

Details of the supplier of the safety data sheet

Manufacturer/Supplier:

GCP Applied Technologies
62 Whittemore Avenue
Cambridge, MA 02140 USA

GCP Canada, Inc.
294 Clements Road W.
Ajax, Ontario L1S 3C6 Canada

Information department:

Environmental Health & Safety
USA: +1-617-876-1400 (24 hours)
+1-800-354-5414 (8AM - 5PM) Not functional within Massachusetts
CAN: 1-905-683-8561 (24 hours)

Transport Emergency: Chemtrec +1-800-424-9300 (24 hours)

2 Hazard(s) identification

Classification of the substance or mixture

Harmful if swallowed.
Causes serious eye damage.

Label elements:

Hazard pictograms



GHS05 GHS07

Danger

Hazard statements

Harmful if swallowed.
Causes serious eye damage.

Precautionary statements

Wash thoroughly after handling.
Wear eye protection / face protection.
Do not eat, drink or smoke when using this product.

(Cont. on page 2)

USGHS

Safety Data Sheet

Printing date 02/17/2016

Version Number 1.1

Reviewed on 02/08/2016

Trade name: DARASET 400

(Cont. from page 1)

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

IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell.

Immediately call a POISON CENTER/doctor.

NFPA ratings (scale 0 - 4)



Health = 2
Fire = 1
Reactivity = 0

HMIS-ratings (scale 0 - 4)



Health = 2
Flammability = 1
Reactivity = 0

Other hazards**Results of PBT and vPvB assessment**

PBT: Not applicable.

vPvB: Not applicable.

3 Composition/information on ingredients**Chemical characterization: Mixtures**

Description: Mixture of the substances listed below with additional nonhazardous ingredients.

Hazardous components:		
10124-37-5	Calcium nitrate	30-50%
13780-06-8	Calcium nitrite	2.0-5.0%
540-72-7	Sodium thiocyanate	2.0-5.0%

Additional information: For the wording of the listed hazard phrases refer to section 16.

4 First-aid measures**Description of first aid measures**

General information: Get medical advice/attention if you feel unwell.

After inhalation: Take affected persons into fresh air and keep quiet.

After skin contact: If skin irritation continues, consult a doctor.

After eye contact:

Rinse opened eye for several minutes under running water.

Rinse cautiously with water for several minutes.

Seek immediate medical advice.

After swallowing:

Wash out mouth with water

Rinse mouth.

Never give anything by mouth to an unconscious person.

(Cont. on page 3)

USGHS

Safety Data Sheet

Printing date 02/17/2016

Version Number 1.1

Reviewed on 02/08/2016

Trade name: DARASET 400

(Cont. from page 2)

Do not induce vomiting; immediately call for medical help.

Information for doctor:

Most important symptoms and effects, both acute and delayed Harmful if swallowed.

Indication of any immediate medical attention and special treatment needed

No further relevant information available.

5 Fire-fighting measures**Extinguishing media****Suitable extinguishing agents:**

CO₂, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

This material, if dried to a solid powder-like form, will become an oxidizer, which may provide oxygen to combustible materials.

Special hazards arising from the substance or mixture No further relevant information available.

Advice for firefighters

Protective equipment: Wear self-contained respiratory protective device.

Additional information Collect contaminated fire fighting water separately. It must not enter the sewage system.

6 Accidental release measures**Personal precautions, protective equipment and emergency procedures**

Wear protective equipment. Keep unprotected persons away.

Use respiratory protective device against the effects of fumes/dust/aerosol.

Avoid contact with eyes.

Environmental precautions:

Inform respective authorities in case of seepage into water course or sewage system.

Methods and material for containment and cleaning up:

Contain and/or absorb spill with inert material (i.e. sand, vermiculite) then place in a suitable container.

Sweep up spilled product into receptacles.

Dispose contaminated material as waste according to section 13 of the SDS.

Reference to other sections

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

USGHS

(Cont. on page 4)

Safety Data Sheet

Printing date 02/17/2016

Version Number 1.1

Reviewed on 02/08/2016

Trade name: *DARASET 400*

(Cont. from page 3)

7 Handling and storage**Handling:****Precautions for safe handling**

Risk of serious damage to eyes.

Open and handle receptacle with care.

Prevent formation of aerosols.

Avoid contact with eyes, skin and clothing.

Do not take internally.

Practice good personal hygiene to avoid ingestion.

Use only with adequate ventilation.

Wash clothing before reuse.

FOR PROFESSIONAL USE ONLY. KEEP OUT OF CHILDREN'S REACH.

Ensure good interior ventilation.

Do not mix directly with acidic materials. Do not mix directly with other admixtures. Hazardous gas may form.

Store in original containers.

Information about protection against explosions and fires: Protect from heat.

Conditions for safe storage, including any incompatibilities**Storage:**

Information about storage in one common storage facility: Protect from heat.

Further information about storage conditions:

Protect from heat and direct sunlight.

Keep receptacle tightly sealed.

Protect from frost.

Store in cool, dry conditions in well sealed original receptacles.

Specific end use(s) No further relevant information available.

8 Exposure controls/personal protection

Additional information about design of technical systems: No further data; see item 7.

Control parameters**Components with limit values that require monitoring at the workplace:**

The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

Additional information: The lists that were valid during the creation were used as basis.

Exposure controls**Personal protective equipment:****General protective and hygienic measures:**

Avoid contact with the eyes and skin.

The usual precautionary measures for handling chemicals should be followed.

Do not add amines to this product. Cancer-causing nitrosamines may be formed. Direct contact with other admixtures, washwater and any other material causing the pH to fall below specification can result in the formation of NO_x gas creating a hazardous situation. Nitric oxide (NO) is a colorless, odorless gas. Nitrogen dioxide (NO₂) is a reddish-brown gas with a highly pungent, bleach-like odor. Exposure can cause irritation to eyes and respiratory

(Cont. on page 5)

USGHS

Safety Data Sheet

Printing date 02/17/2016

Version Number 1.1

Reviewed on 02/08/2016

Trade name: **DARASET 400**

(Cont. from page 4)

system and effect the central nervous and cardiovascular systems. Severe overexposure can be fatal. This hazard does not exist when mixed with other admixtures in concrete.

Breathing equipment:

Respiratory protection is not normally required. However, a chemical cartridge respirator with organic vapor cartridge and a prefilter for dusts/mists is required at or above the applicable exposure limits (consult exposure guidelines). If no limits exist, use an approved respirator whenever a vapor or mist is generated or if respiratory irritation occurs. Supplied air respirator (SCBA) is required at exposure levels above the capabilities of a chemical cartridge respirator.

Protection of hands:

Gloves should be worn to prevent skin contact and should be impermeable and resistant to the product.

Material of gloves

Gloves should be worn to prevent skin contact and should be impermeable and resistant to the product.

Eye protection:

Safety glasses with side shield protection.

Safety glasses with side shields should be worn to prevent contact due to splashing. Under high vapor mist concentrations, tightly sealed goggles should be worn.



A face shield should also be worn if there is potential exposure to splash or spray.

Body protection:

Protective work clothing

Use personal protective equipment as required.

Take off contaminated clothing.

9 Physical and chemical properties

Information on basic physical and chemical properties

General Information**Appearance:**

Form:	Liquid
Color:	According to product specification
Odor:	Characteristic
Odor threshold:	Not determined.

pH-value (~) at 20 °C (68 °F): 9

Change in condition

Melting point/Melting range:	Undetermined.
Boiling point/Boiling range:	Undetermined.
Flash point:	100 °C (212 °F)

Flammability (solid, gaseous): Not applicable.

Decomposition temperature:	Not determined.
Auto igniting:	Product is not selfigniting.
Danger of explosion:	Product does not present an explosion hazard.

(Cont. on page 6)
USGHS

Safety Data Sheet

Printing date 02/17/2016

Version Number 1.1

Reviewed on 02/08/2016

Trade name: *DARASET 400*

(Cont. from page 5)

Explosion limits:

Lower:	Not determined.
Upper:	Not determined.
VOC Content (max):	Not determined.

Vapor pressure:	Not determined.
Density: (~) at 20 °C (68 °F)	1.4 g/cm ³ (11.683 lbs/gal)
Relative density	Not determined.
Vapor density	Not determined.
Evaporation rate	Not determined.

Solubility in / Miscibility with Water:	Not miscible or difficult to mix.
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Partition coefficient (n-octanol/water): Not determined.**Viscosity:**

Dynamic:	Not determined.
Kinematic:	Not determined.
Molecular weight	Not applicable.

Other information No further relevant information available.**10 Stability and reactivity****Reactivity** Stable under normal conditions.**Chemical stability****Thermal decomposition:** No decomposition if used according to specifications.**Possibility of hazardous reactions**

While not classified as oxidising, if allowed to dry out and come into contact with combustible material, this product may cause fire.

Contact with acids liberates very toxic gas.

Conditions to avoid No further relevant information available.**Incompatible materials:**Avoid direct contact with other admixtures and any other material which could cause the pH of this product to fall below 8.0. Those conditions can result in the formation of Nitrogen oxide (NO, NO₂) gas, creating a hazardous situation.**Hazardous decomposition products:**

Carbon monoxide and carbon dioxide

Nitrogen oxides

Additional information: See section 7 for information on handling, storage and conditions to be avoided.

USGHS

(Cont. on page 7)

Safety Data Sheet

Printing date 02/17/2016

Version Number 1.1

Reviewed on 02/08/2016

Trade name: *DARASET 400*

(Cont. from page 6)

11 Toxicological information**Information on toxicological effects****Acute toxicity:****LD/LC50 values relevant for classification:****10124-37-5 Calcium nitrate**

Oral | LD50 | 302 mg/kg (rat)

13780-06-8 Calcium nitrite

Oral | LD50 | 283 mg/kg (rat)

Primary irritant effect:**on the skin:** No irritating effect expected**on the eye:** Causes serious eye damage.**inhalation:** No irritating effect expected**Ingestion:**

May be fatal if swallowed and enters airways.

Harmful if swallowed.

Additional toxicological information:**Carcinogenic categories****IARC (International Agency for Research on Cancer) Human Carcinogenicity:
Group 1- Positive, Group 2A- Probable, Group 2B- Possible, Group 3- Not Classifiable**

102-71-6 | Triethanolamine

3

NTP (National Toxicology Program)**K–Known to be carcinogenic, R–May reasonably be anticipated to be carcinogenic**

None of the ingredients is listed.

OSHA-Ca (Occupational Safety & Health Administration)

None of the ingredients is listed.

12 Ecological information**Toxicity****Aquatic toxicity:** No further relevant information available.**Persistence and degradability** No further relevant information available.**Behavior in environmental systems:****Bioaccumulative potential** No further relevant information available.**Mobility in soil** No further relevant information available.**Additional ecological information:****General notes:** Not known to be hazardous to water.**Results of PBT and vPvB assessment****PBT:** Not applicable.**vPvB:** Not applicable.**Other adverse effects** No further relevant information available.

USGHS

(Cont. on page 8)

Safety Data Sheet

Printing date 02/17/2016

Version Number 1.1

Reviewed on 02/08/2016

Trade name: *DARASET 400*

(Cont. from page 7)

13 Disposal considerations**Waste treatment methods** Comply with Federal, State and local regulations.**Recommendation:**

Must not be disposed of together with household garbage. Do not allow product to reach sewage system.

Uncleaned packagings:**Recommendation:** Disposal must be made according to official regulations.**14 Transport information****UN-Number**

DOT, ADR, ADN, IMDG, IATA Not applicable.

UN proper shipping name

DOT, ADR, ADN, IMDG, IATA Not applicable.

Transport hazard class(es)DOT, ADR, ADN, IMDG, IATA
Class Not applicable.**Packing group**

DOT, ADR, IMDG, IATA Not applicable.

Environmental hazards:

Marine pollutant: No

Special precautions for user Not applicable.**Transport/Additional information:** Not classified as a dangerous good for transport by road, rail or air.**DOT****Remarks:** Not Regulated.**UN "Model Regulation":** Not applicable.**15 Regulatory information****SARA (Superfund Amendments and Reauthorization Act)****Section 302/304 (extremely hazardous substances):**

None of the ingredients is listed.

Section 313 Reportable Ingredients (Chemicals present below reporting threshold are exempt):

10124-37-5 | Calcium nitrate | 40.6%

SARA Section 312/Tier I & II Hazard Categories:

Health Delayed (chronic)	Yes
Health Immediate (acute)	Yes
Flammable	No
Reactive	No
Pressure	No

(Cont. on page 9)

USGHS

Safety Data Sheet

Printing date 02/17/2016

Version Number 1.1

Reviewed on 02/08/2016

Trade name: DARASET 400

(Cont. from page 8)

North America Chemical Inventory Status**TSCA (Toxic Substances Control Act - United States):**

All ingredients are listed or exempt from listing unless otherwise noted below.

CEPA (Canadian DSL):

All ingredients are listed or exempt from listing unless otherwise noted below.

Right to Know Ingredient Disclosure

7732-18-5 | Water

California Proposition 65**Chemicals known to cause cancer:**

None of the ingredients is listed.

Chemicals known to cause reproductive toxicity for females:

None of the ingredients is listed.

Chemicals known to cause reproductive toxicity for males:

None of the ingredients is listed.

Chemicals known to cause developmental toxicity:

None of the ingredients is listed.

Carcinogenicity Categories**EPA (Environmental Protection Agency)**

None of the ingredients is listed.

**TLV-ACGIH (THE American Conference of Governmental Industrial Hygienists)
Human Carcinogen - A1 Confirmed, A2 Suspected, A3 Unknown Relevance, A4 Not Classifiable**

None of the ingredients is listed.

NIOSH-Cancer (National Institute for Occupational Safety and Health)

None of the ingredients is listed.

Volatile Organic Compounds (VOC) reported per the Emission Standards.

If no g/L value is provided this product is not subject to above standard.

16 Other information

The data included herein are presented in accordance with various environment, health and safety regulations. It is the responsibility of a recipient of the data to remain currently informed on chemical hazard information, to design and update its own program and to comply with all national, federal, state and local laws and regulations applicable to safety, occupational health, right-to-know and environmental protection.

Department issuing SDS:

GCP Applied Technologies
62 Whittemore Avenue
Cambridge, MA 02140 USA
USA: +1-617-876-1400 (24 hours)
+1-800-354-5414

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