SAFETY DATA SHEET

1. Identification

| Product identifier | Target Pro-Spreader Activator | |
|---------------------------------|--|-------------------|
| Other means of identification | | |
| Product code | 01037 | |
| Recommended use | Agricultural/ Horticultural Use- Adjuvant- Refer | to product label. |
| Recommended restrictions | Refer to product label. | |
| Manufacturer/Importer/Supplier/ | Distributor information | |
| Manufacturer | | |
| Manufactured for: Address | Target Specialty Products, Inc. | |
| | 15415 Marquardt Avenue | |
| | Santa Fe Springs, CA 90670 | |
| | United States | |
| Telephone | (310) 773-8912 | |
| Manufactured by: | Brandt Consolidated, Inc. | |
| Address | | |
| | 2935 South Koke Mill Road | |
| | Springfield, IL 62711 | |
| Talanhana | United States 1-217-547-5800 | |
| Telephone Website | www.brandt.co | |
| E-mail | msds@brandt.co | |
| Contact Person | EH&S/ Regulatory Department | |
| Emergency phone number | CHEMTREC (24 Hours): | |
| USA, Canada, | 1-800-424-9300 | |
| Puerto Rico | | |
| Virgin Islands | 1-800-424-9300 | |
| International Maritime | +1 (703) 527-3887 | |
| 2. Hazard(s) identification | | |
| Physical hazards | Not classified. | |
| Health hazards | Acute toxicity, oral | Category 4 |
| | Serious eye damage/eye irritation | Category 2A |
| Environmental hazards | Hazardous to the aquatic environment, acute hazard | Category 2 |
| | Hazardous to the aquatic environment, | Category 2 |

OSHA defined hazards

Label elements



Warning

long-term hazard

Not classified.

Signal word Hazard statement Precautionary statement Prevention

Harmful if swallowed. Causes serious eye irritation.

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

| Response | If swallowed: Call a poison center/doctor if you feel unwell. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Rinse mouth. If eye irritation persists: Get medical advice/attention. |
|--|---|
| Storage | Store away from incompatible materials. |
| Disposal | Dispose of contents/container in accordance with local/regional/national/international regulations. |
| Hazard(s) not otherwise classified (HNOC) | None known. |
| Supplemental information | None. |

3. Composition/information on ingredients

Mixtures

| Chemical name | Common name and synonyms | CAS number | % |
|-----------------------------------|--------------------------|--------------|---------------|
| Poly(ethylene oxide) | | 25322-68-3 | 1 - < 3 |
| Alkyl phenol ethoxylate | | Trade Secret | Trade Secret |
| Propylene glycol | | 57-55-6 | Trade Secret* |
| Other components below reportable | evels | | 20 - < 30 |

Other components below reportable levels

*Designates that a specific chemical identity and/or percentage of composition has been withheld as a trade secret.

4. First-aid measures

| Inhalation | Move to fresh air. Call a physician if symptoms develop or persist. |
|--|---|
| Skin contact | Wash off with soap and water. Get medical attention if irritation develops and persists. |
| Eye contact | Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention if irritation develops and persists. |
| Ingestion | Rinse mouth. If vomiting occurs, keep head low so that stomach content doesn't get into the lungs. Get medical advice/attention if you feel unwell. Get medical attention if symptoms occur. |
| Most important symptoms/effects, acute and delayed | Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Severe eye irritation. |
| Indication of immediate medical attention and special treatment needed | Provide general supportive measures and treat symptomatically. Keep victim warm. Keep victim under observation. Symptoms may be delayed. |
| General information | Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Show this safety data sheet to the doctor in attendance. |
| 5. Fire-fighting measures | |
| Suitable extinguishing media | Alcohol resistant foam. Water spray. Water fog. Dry chemical powder. Carbon dioxide (CO2). |
| Unsuitable extinguishing media | Do not use water jet as an extinguisher, as this will spread the fire. |
| Specific hazards arising from the chemical | During fire, gases hazardous to health may be formed. |
| Special protective equipment and precautions for firefighters | Self-contained breathing apparatus and full protective clothing must be worn in case of fire. |
| Fire-fighting equipment/instructions | Move containers from fire area if you can do so without risk. |
| Specific methods | Use standard firefighting procedures and consider the hazards of other involved materials. |
| General fire hazards | No unusual fire or explosion hazards noted. |
| | |

6. Accidental release measures

Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Keep out of Personal precautions, low areas. Wear appropriate protective equipment and clothing during clean-up. Do not touch protective equipment and damaged containers or spilled material unless wearing appropriate protective clothing. Ensure emergency procedures adequate ventilation. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS.

| Methods and materials for containment and cleaning up | Large Spills: This material is classified as a water pollutant under the Clean Water Act and should be prevented from contaminating soil or from entering sewage and drainage systems which lead to waterways. Stop the flow of material, if this is without risk. Use water spray to reduce vapors or divert vapor cloud drift. Dike the spilled material, where this is possible. Cover with plastic sheet to prevent spreading. Absorb in vermiculite, dry sand or earth and place into containers. Following product recovery, flush area with water. |
|---|--|
| | Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination. |
| | Never return spills to original containers for re-use. For waste disposal, see section 13 of the SDS. |
| Environmental precautions | Avoid release to the environment. Inform appropriate managerial or supervisory personnel of all environmental releases. Contact local authorities in case of spillage to drain/aquatic environment. Prevent further leakage or spillage if safe to do so. Avoid discharge into drains, water courses or onto the ground. |
| 7. Handling and storage | |
| Precautions for safe handling | Do not taste or swallow. Avoid contact with eyes. Avoid prolonged exposure. Provide adequate ventilation. Wear appropriate personal protective equipment. When using, do not eat, drink or smoke. Wash hands thoroughly after handling. Avoid release to the environment. Observe good industrial hygiene practices. |
| Conditions for safe storage, including any incompatibilities | Store in original tightly closed container. Keep container tightly closed. Store away from incompatible materials (see Section 10 of the SDS). |

8. Exposure controls/personal protection

Occupational exposure limits

| Components | Туре | Value | Form |
|---------------------------------------|--|---------------------------------|--------------------------------|
| Poly(ethylene oxide) (CAS 25322-68-3) | TWA | 10 mg/m3 | Particulate. |
| Propylene glycol (CAS 57-55-6) | TWA | 10 mg/m3 | Aerosol. |
| iological limit values | No biological exposure limits noted for | or the ingredient(s). | |
| ppropriate engineering ontrols | Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. Provide eyewash station. | | |
| ndividual protection measures | , such as personal protective equipm | ent | |
| Eye/face protection | Face shield is recommended. Wear s | afety glasses with side shields | s (or goggles). |
| Skin protection | | | |
| Hand protection | Wear appropriate chemical resistant | gloves. | |
| Other | Wear suitable protective clothing. | | |
| Respiratory protection | In case of insufficient ventilation, wea required. | r suitable respiratory equipme | nt. Respiratory protection not |
| Thermal hazards | Wear appropriate thermal protective | clothing, when necessary. | |
| eneral hygiene onsiderations | Keep away from food and drink. Alwa washing after handling the material a work clothing and protective equipme | nd before eating, drinking, and | |

9. Physical and chemical properties

| Appearance | Liquid. |
|---------------------------------|------------------------|
| Physical state | Liquid. |
| Form | Liquid. |
| Color | Yellow |
| Odor | Alcoholic. Very faint. |
| Odor threshold | Not available. |
| рН | 4.6 (10% solution) |
| Salt-Out / Crystallization Temp | Not available. |

| Melting point/freezing point | Not available. |
|--|----------------------|
| Initial boiling point and boiling range | Not available. |
| Flash point | Not available. |
| Evaporation rate | Not available. |
| Flammability (solid, gas) | Not available. |
| Upper/lower flammability or exp | losive limits |
| Explosive limit - lower (%) | Not available. |
| Explosive limit - upper (%) | Not available. |
| Vapor pressure | Not available. |
| Vapor density | > 1 |
| Relative density | 1.03 g/cm3 (typical) |
| Solubility(ies) | |
| Solubility (water) | emulsifiable |
| Partition coefficient (n-octanol/water) | Not available. |
| Auto-ignition temperature | Not available. |
| Decomposition temperature | Not available. |
| Viscosity | Not available. |
| Other information | |
| Pounds per gallon | 8.6 lb/gal (typical) |
| 10 Stability and reactivity | |

10. Stability and reactivity

| Reactivity | The product is stable and non-reactive under normal conditions of use, storage and transport. |
|---------------------------------------|---|
| Chemical stability | Material is stable under normal conditions. |
| Possibility of hazardous reactions | Hazardous polymerization does not occur. |
| Conditions to avoid | Contact with incompatible materials. |
| Incompatible materials | Strong oxidizing agents. |
| Hazardous decomposition products | No hazardous decomposition products are known. |

11. Toxicological information

| Information on likely routes of e | ormation on likely routes of exposure | |
|--|---|--|
| Ingestion | Harmful if swallowed. | |
| Inhalation | Prolonged inhalation may be harmful. | |
| Skin contact | No adverse effects due to skin contact are expected. | |
| Eye contact | Causes serious eye irritation. | |
| Symptoms related to the physical, chemical and toxicological characteristics | Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Severe eye irritation. | |

Information on toxicological effects

| Acute toxicity | Harmful if swallowed. Not known. | Harmful if swallowed. Not known. | |
|---------------------------|----------------------------------|----------------------------------|--|
| Product | Species | Test Results | |
| Target Pro-Spreader Activ | vator (CAS Mixture) | | |
| Acute | | | |
| Dermal | | | |
| LD50 | Rabbit | > 2020 mg/kg Study No.: 2927-96 | |
| Oral | | | |
| LD50 | Dog | 94.4334 g/kg estimated | |
| | Guinea pig | 91.4513 g/kg estimated | |
| | Mouse | 118.7873 g/kg estimated | |
| | | | |

| Product | Species | Test Results |
|--|---|---|
| | Rabbit | 89.4632 g/kg estimated |
| | Rat | 1703 mg/kg Study No.: 2926-96 |
| Other | | |
| LD50 | Mouse | 32952.2852 mg/kg estimated |
| | Rat | 31923.459 mg/kg estimated |
| Components | Species | Test Results |
| Propylene glycol (CAS 57-55-6) | | |
| Acute | | |
| Oral | Dog | 10 a/ka |
| LD50 | Dog | 19 g/kg |
| | Guinea pig | 18.4 g/kg |
| | Mouse | 23.9 g/kg |
| | Rabbit | 18 g/kg |
| | Rat | 30 g/kg |
| Other | Maura | |
| LD50 | Mouse | 6630 mg/kg |
| | Rat | 6423 mg/kg |
| * Estimates for product may be | e based on additional component data not shown. | |
| Skin corrosion/irritation | Prolonged skin contact may cause temporary irrita | tion. |
| Erythema value | 0.7500 | |
| Oedema value | 0.0000 | |
| Serious eye damage/eye rritation | Causes serious eye irritation. | |
| Corneal opacity value | 2.0000 | |
| Iris lesion value | 0.0000 | |
| Conjunctival reddening value | 3.0000 | |
| Conjunctival oedema value | 2.0000 | |
| Recover days | 17 | |
| Respiratory or skin sensitization | | |
| Respiratory sensitization | Not available. | |
| Skin sensitization | This product is not expected to cause skin sensitiz | ation. |
| Germ cell mutagenicity | No data available to indicate product or any compo mutagenic or genotoxic. | onents present at greater than 0.1% are |
| Carcinogenicity | This product is not considered to be a carcinogen | by IARC, ACGIH, NTP, or OSHA. |
| OSHA Specifically Regulated Not listed. | d Substances (29 CFR 1910.1001-1050) | |
| Reproductive toxicity | This product is not expected to cause reproductive | or developmental effects. |
| Specific target organ toxicity - single exposure | Not classified. | |
| Specific target organ toxicity - epeated exposure | Not classified. | |
| Aspiration hazard | Not available. | |
| Chronic effects | Prolonged inhalation may be harmful. | |
| 12. Ecological information | | |
| Ecotoxicity | Toxic to aquatic life with long lasting effects. | |
| | | |

| Product | | Species | Test Results | |
|---|-----------------|---|-------------------------------------|--|
| Target Pro-Spreader Activa | ator (CAS Mixtu | ure) | | |
| Aquatic | | | | |
| Crustacea | EC50 | Daphnia | 49701.7891 mg/l, 48 hours estimated | |
| Fish | LC50 | Fish | 7.1493 mg/l, 96 hr estimated | |
| Components | | Species | Test Results | |
| Alkyl phenol ethoxylate (CA | AS Trade Secre | et) | | |
| Aquatic | | | | |
| Fish | LC50 | Fish | 3.8 - 6.2 mg/l, 96 hr | |
| Poly(ethylene oxide) (CAS | 25322-68-3) | | | |
| Aquatic | | | | |
| Fish | LC50 | Atlantic salmon (Salmo salar) | > 1000 mg/l, 96 hours | |
| Propylene glycol (CAS 57- | 55-6) | | | |
| Aquatic | | | | |
| Crustacea | EC50 | Water flea (Daphnia magna) | > 10000 mg/l, 48 hours | |
| Fish | LC50 | Fathead minnow (Pimephales promela | s) 29485 - 39339 mg/l, 96 hours | |
| * Estimates for product may | y be based on | additional component data not shown. | | |
| sistence and degradability | No data is | No data is available on the degradability of this product. | | |
| accumulative potential | Not availa | Not available. | | |
| Partition coefficient n-oct Propylene glycol | anol / water (I | og Kow) -0.92 | | |
| bility in soil | No data a | vailable. | | |
| er adverse effects | | No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component. | | |

13. Disposal considerations

| Disposal instructions | Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Do not allow this material to drain into sewers/water supplies. Do not contaminate ponds, waterways or ditches with chemical or used container. Dispose of contents/container in accordance with local/regional/national/international regulations. |
|--|--|
| Local disposal regulations | Dispose in accordance with all applicable regulations. |
| Hazardous waste code | The waste code should be assigned in discussion between the user, the producer and the waste disposal company. |
| Waste from residues / unused products | Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions). |
| Contaminated packaging | Empty containers should be taken to an approved waste handling site for recycling or disposal. Since emptied containers may retain product residue, follow label warnings even after container is emptied. |

14. Transport information

DOT

Not regulated as dangerous goods.

IATA N

Not regulated as dangerous goods.

IMDG

| UN number UN proper shipping name Transport hazard class(es) | UN3082 Environmentally hazardous substances, liquid, n.o.s. (Alkyl phenol ethoxylate) |
|--|--|
| Class Subsidiary risk Label(s) | 9 - 9 |
| Packing group Environmental hazards Marine pollutant | III Yes |

EmS
Not available.

Special precautions for user
Read safety instructions, SDS and emergency procedures before handling.

IMDG
Important instruction instructin instructin instruction instructin instruction instruction inst



Marine pollutant



15. Regulatory information This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication **US** federal regulations Standard, 29 CFR 1910.1200. TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D) Not regulated. CERCLA Hazardous Substance List (40 CFR 302.4) Not listed. SARA 304 Emergency release notification Not regulated. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050) Not listed. Superfund Amendments and Reauthorization Act of 1986 (SARA) Hazard categories Immediate Hazard - Yes Delayed Hazard - No Fire Hazard - No Pressure Hazard - No Reactivity Hazard - No SARA 302 Extremely hazardous substance Not listed. SARA 311/312 Hazardous No chemical SARA 313 (TRI reporting) Not regulated. Other federal regulations Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List Not regulated. Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130) Not regulated. Safe Drinking Water Act Not regulated. (SDWA)

US state regulations

US. Massachusetts RTK - Substance List

Not regulated.

US. New Jersey Worker and Community Right-to-Know Act

Propylene glycol (CAS 57-55-6)

US. Pennsylvania Worker and Community Right-to-Know Law

Propylene glycol (CAS 57-55-6)

US. Rhode Island RTK

Not regulated.

US. California Proposition 65

California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65): This material is not known to contain any chemicals currently listed as carcinogens or reproductive toxins.

International Inventories

| Country(s) or region | Inventory name | On inventory (yes/no)* |
|-----------------------------|---|------------------------|
| Australia | Australian Inventory of Chemical Substances (AICS) | Yes |
| Canada | Domestic Substances List (DSL) | Yes |
| Canada | Non-Domestic Substances List (NDSL) | No |
| China | Inventory of Existing Chemical Substances in China (IECSC) | Yes |
| Europe | European Inventory of Existing Commercial Chemical Substances (EINECS) | No |
| Europe | European List of Notified Chemical Substances (ELINCS) | No |
| Japan | Inventory of Existing and New Chemical Substances (ENCS) | Yes |
| Korea | Existing Chemicals List (ECL) | Yes |
| New Zealand | New Zealand Inventory | Yes |
| Philippines | Philippine Inventory of Chemicals and Chemical Substances (PICCS) | Yes |
| United States & Puerto Rico | Toxic Substances Control Act (TSCA) Inventory | Yes |

*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s) A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

16. Other information, including date of preparation or last revision

| Issue date Revision date Version # | 03-17-2016 04-04-2016 04 |
|--|--|
| Disclaimer | The information provided in this Safety Data Sheet is correct to the best of Manufacturer's knowledge, information and belief at the date of its publication; however, it is provided only as a guidance for safe handling, use, processing, storage, transportation, disposal and release of the Product. No warranties of any kind, either expressed or implied, including warranties of merchantability or fitness for a particular purpose, are made with respect to the Product or the information provided herein, or that the Product or information herein may be used without infringing the intellectual property rights of others. The information provided in this Safety Data Sheet relates only to the specific Product designated and may not be valid if the Product is used in combination with other materials or in any other process, unless specified herein. The user assumes all risk and liability for loss, injury, damage or expense due to any use, handling, storage or disposal of the Product, and Manufacturer recommends that the user conducts its owns tests of the Product to determine suitability of the Product for user's particular use. |
| Revision Information | Hazard(s) identification: Supplemental information Toxicological Information: Toxicological Data |