

# SAFETY DATA SHEET



Revision date 09-Aug-2021

Revision Number 1

## 1. Identification

### Product identifier

Product Name Comando

### Other means of identification

Product Code(s) 42750-92

UN/ID no. UN3082

Synonyms None

Registration Number(s) 42750-92

### Recommended use of the chemical and restrictions on use

Recommended use Herbicide

Restrictions on use Follow label instructions

### Details of the supplier of the safety data sheet

#### Company Address

ALBAUGH LLC  
1525 NE 36th St,  
Ankeny, IA 50211

#### Emergency telephone number

For Chemical Emergency Spill, Leak, Fire, Exposure, or Accident Call  
CHEMTREC Day or Night

- Within USA and Canada: 1-800-424-9300
- Outside USA and Canada: +1 703-741-5970 (collect calls accepted)

This product is an EPA FIFRA registered pesticide. Some classifications on this SDS are not the same as the FIFRA label. Certain sections of this SDS are superseded by federal law governed by US EPA for a registered pesticide. Please see Section 15. REGULATORY INFORMATION for explanation.

## 2. Hazard(s) identification

### Classification

|  |            |
|--|------------|
| Serious eye damage/eye irritation                | Category 1 |
| Specific target organ toxicity (single exposure) | Category 3 |

### Hazards not otherwise classified (HNOC)

Not applicable

### Label elements

**Danger****Hazard statements**

Causes serious eye damage  
May cause respiratory irritation

**Appearance** No data available**Physical state** Liquid**Odor** Aromatic**Precautionary Statements - Prevention**

Wear eye protection/ face protection  
Avoid breathing dust/fume/gas/mist/vapors/spray  
Use only outdoors or in a well-ventilated area

**Precautionary Statements - Response**

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing  
Immediately call a POISON CENTER or doctor  
IF INHALED: Remove person to fresh air and keep comfortable for breathing  
Call a POISON CENTER or doctor if you feel unwell

**Precautionary Statements - Storage**

Store in a well-ventilated place. Keep container tightly closed  
Store locked up

**Precautionary Statements - Disposal**

Dispose of contents/container to an approved waste disposal plant

**Unknown acute toxicity****Other information**

Harmful to aquatic life with long lasting effects.

**3. Composition/information on ingredients****Substance**

Not applicable.

**Mixture**

| Chemical name      | CAS No      | Weight-%    | Active Ingredient |
|--------------------|-------------|-------------|-------------------|
| 2,4-D TIPA Salt    | 32341-80-3  | 37.83-40.17 | X                 |
| Clpyralid MEA Salt | 57754-85-5  | 4.85-5.35   | X                 |
| Other Ingredients  | PROPRIETARY | >55.00      |                   |

\*The exact percentage (concentration) of composition has been withheld as a trade secret.

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

|   |  |
|---|--|
| <b>General advice</b>                     | Immediate medical attention is required. Show this safety data sheet to the doctor in attendance.  |
| <b>Inhalation</b>                         | Remove to fresh air. Get medical attention immediately if symptoms occur. IF exposed or concerned: Get medical advice/attention.   |
| <b>Eye contact</b>                        | Get immediate medical advice/attention. Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Keep eye wide open while rinsing. Do not rub affected area. |
| <b>Skin contact</b>                       | Wash off immediately with soap and plenty of water for at least 15 minutes. Get medical attention if irritation develops and persists.   |
| <b>Ingestion</b>                          | Clean mouth with water and drink afterwards plenty of water. Never give anything by mouth to an unconscious person. Do NOT induce vomiting. Call a physician.  |
| <b>Self-protection of the first aider</b> | Avoid contact with skin, eyes or clothing. Wear personal protective clothing (see section 8).  |

**Most important symptoms and effects, both acute and delayed**

|                 |                    |
|-----------------|--------------------|
| <b>Symptoms</b> | Burning sensation. |
|-----------------|--------------------|

**Indication of any immediate medical attention and special treatment needed**

|                           |                        |
|---------------------------|------------------------|
| <b>Note to physicians</b> | Treat symptomatically. |
|---------------------------|------------------------|

**5. Fire-fighting measures**

|   |  |
|---|--|
| <b>Suitable Extinguishing Media</b>                   | Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.                            |
| <b>Large Fire</b>                                     | CAUTION: Use of water spray when fighting fire may be inefficient.   |
| <b>Unsuitable extinguishing media</b>                 | Do not scatter spilled material with high pressure water streams.  |
| <b>Specific hazards arising from the chemical</b>     | No data available.   |
| <b>Explosion data</b>                                 |  |
| <b>Sensitivity to mechanical impact</b>               | None.  |
| <b>Sensitivity to static discharge</b>                | None.  |
| <b>Special protective equipment for fire-fighters</b> | Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear. Use personal protection equipment. |

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

|                             |  |
|-----------------------------|--|
| <b>Personal precautions</b> | Avoid contact with skin, eyes or clothing. Use personal protective equipment as required. Ensure adequate ventilation. Evacuate personnel to safe areas. |
| <b>Other information</b>    | Refer to protective measures listed in Sections 7 and 8.   |

**Methods and material for containment and cleaning up**

|                                |   |
|--------------------------------|---|
| <b>Methods for containment</b> | Prevent further leakage or spillage if safe to do so. |
|--------------------------------|---|

**Methods for cleaning up** Pick up and transfer to properly labeled containers.

## 7. Handling and storage

### Precautions for safe handling

**Advice on safe handling** Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin, eyes or clothing. Do not eat, drink or smoke when using this product. Ensure adequate ventilation. Avoid breathing vapors or mists. In case of insufficient ventilation, wear suitable respiratory equipment.

### Conditions for safe storage, including any incompatibilities

**Storage Conditions** Keep containers tightly closed in a dry, cool and well-ventilated place. Store locked up. Keep out of the reach of children.

## 8. Exposure controls/personal protection

### Control parameters

#### Exposure Limits

#### **Biological occupational exposure limits**

This product, as supplied, does not contain any hazardous materials with biological limits established by the region specific regulatory bodies

### Appropriate engineering controls

**Engineering controls** Showers  
Eyewash stations  
Ventilation systems.

### Individual protection measures, such as personal protective equipment

**Eye/face protection** Tight sealing safety goggles.

**Hand protection** Wear suitable gloves.

**Skin and body protection** Wear suitable protective clothing.

**Respiratory protection** No protective equipment is needed under normal use conditions. If exposure limits are exceeded or irritation is experienced, ventilation and evacuation may be required.

**General hygiene considerations** Avoid contact with skin, eyes or clothing. Wear suitable gloves and eye/face protection. Do not eat, drink or smoke when using this product.

## 9. Physical and chemical properties

### Information on basic physical and chemical properties

|                |                   |
|----------------|-------------------|
| Physical state | Liquid            |
| Appearance     | No data available |
| Color          | Amber             |
| Odor           | Aromatic          |
| Odor threshold | No data available |

| <u>Property</u>                        | <u>Values</u>  | <u>Remarks • Method</u> |
|--|--|-------------------------|
| pH                                     | 4.5 5.5  |                         |
| Melting point / freezing point         | No data available  |                         |
| Boiling point / boiling range          | No data available  |                         |
| Flash point                            | > 100  |                         |
| Evaporation rate                       | No data available  |                         |
| Flammability (solid, gas)              | No data available  |                         |
| Flammability Limit in Air              |  |                         |
| Upper flammability or explosive limits | No data available  |                         |
| Lower flammability or explosive limits | No data available  |                         |
| Vapor pressure                         | 1.33 mPa (pure, 24°C) (Clopyralid)<br>1.86 x 10 <sup>-2</sup> mPa (25°C) (2,4-D Acid)  |                         |
| Vapor density                          | No data available  |                         |
| Relative density                       | No data available  |                         |
| Water solubility                       | No data available  |                         |
| Solubility(ies)                        | Emulsifies   |                         |
| Partition coefficient                  | log Pow = -1.81 (pH5), -2.63 (pH7),<br>-2.55 (pH9), 1.07 (unionized, 25°C)<br>(Clopyralid) log Pow = 2.58 – 2.83 (pH<br>1), 0.04 – 0.33 (pH 5), -0.75 (pH 7)<br>(2,4-D Acid) |                         |
| Autoignition temperature               | No data available  |                         |
| Decomposition temperature              |  |                         |
| Kinematic viscosity                    | 20.8 cSt (20°C); 9.2 cSt (40°C)  |                         |
| Dynamic viscosity                      | No data available  |                         |

**Other information**

|                      |                   |
|----------------------|-------------------|
| Explosive properties | No data available |
| Oxidizing properties | No data available |
| Softening point      | No data available |
| Molecular weight     | No data available |
| VOC Content (%)      | No data available |
| Liquid Density       | 1.14-1.18*        |
| Bulk density         | No data available |

\*Listed density is an approximate value and does not necessarily represent that of a specific batch

## 10. Stability and reactivity

|                                    |  |
|------------------------------------|--|
| Reactivity                         | No data available.                                   |
| Chemical stability                 | Stable under normal conditions.                      |
| Possibility of hazardous reactions | None under normal processing.                        |
| Conditions to avoid                | None known based on information supplied.            |
| Incompatible materials             | Strong acids. Strong bases. Strong oxidizing agents. |
| Hazardous decomposition products   | None known based on information supplied.            |

## 11. Toxicological information

**Information on likely routes of exposure****Product Information**

|                     |   |
|---------------------|---|
| <b>Inhalation</b>   | Specific test data for the substance or mixture is not available. May cause irritation of respiratory tract.                                      |
| <b>Eye contact</b>  | Specific test data for the substance or mixture is not available. Causes serious eye damage. May cause irreversible damage to eyes.               |
| <b>Skin contact</b> | Specific test data for the substance or mixture is not available. May cause irritation.   |
| <b>Ingestion</b>    | Specific test data for the substance or mixture is not available. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea. |

**Symptoms related to the physical, chemical and toxicological characteristics**

**Symptoms** Redness. Burning. May cause blindness.

**Acute toxicity****Numerical measures of toxicity**

The following values are calculated based on chapter 3.1 of the GHS document

**Unknown acute toxicity****Component Information**

| Chemical name                     | Oral LD50            | Dermal LD50 | Inhalation LC50 |
|-----------------------------------|----------------------|-------------|-----------------|
| Clopyralid MEA Salt<br>57754-85-5 | = 2675 mg/kg ( Rat ) | -           | -               |

**Delayed and immediate effects as well as chronic effects from short and long-term exposure**

|  |   |
|--|---|
| <b>Skin corrosion/irritation</b>         | May cause skin irritation.  |
| <b>Serious eye damage/eye irritation</b> | Classification based on data available for ingredients. Causes burns. Risk of serious damage to eyes. |
| <b>Respiratory or skin sensitization</b> | Did not cause sensitization on laboratory animals.  |
| <b>Germ cell mutagenicity</b>            | No data available.  |
| <b>Carcinogenicity</b>                   | No data available.  |

The table below indicates whether each agency has listed any ingredient as a carcinogen.

**Legend****IARC (International Agency for Research on Cancer)**

Group 2B - Possibly Carcinogenic to Humans

Group 2B\*: Possibly Carcinogenic to Humans. Listed as Category 2B by the International Agency for Research on Cancer (IARC) but expert opinion based on weight of evidence is that classification as a carcinogen is not warranted.

**OSHA (Occupational Safety and Health Administration of the US Department of Labor)**

X - Present

|                                 |                                   |
|---------------------------------|-----------------------------------|
| <b>Reproductive toxicity</b>    | No data available.                |
| <b>STOT - single exposure</b>   | May cause respiratory irritation. |
| <b>STOT - repeated exposure</b> | No data available.                |

|                       |  |
|-----------------------|--|
| Target organ effects  | liver, kidney, Respiratory system, Eyes, Skin, Central nervous system. |
| Aspiration hazard     | No data available.   |
| Other adverse effects | No data available.   |
| Interactive effects   | No data available.   |

## 12. Ecological information

|                               |  |
|-------------------------------|--|
| Ecotoxicity                   | Harmful to aquatic life with long lasting effects. |
| Persistence and degradability | No data available.                                 |
| Bioaccumulation               | There is no data for this product.                 |
| Component Information         |  |
| Other adverse effects         | No data available.                                 |

## 13. Disposal considerations

### Waste treatment methods

|                                     |   |
|-------------------------------------|---|
| Waste from residues/unused products | Dispose of in accordance with local regulations. Dispose of waste in accordance with environmental legislation. |
| Contaminated packaging              | Do not reuse empty containers.  |
| US EPA Waste Number                 | U057 U240   |

## 14. Transport information

### DOT

|             |                         |  |
|-------------|-------------------------|--|
| Description | Containers < 30 gallons | Not regulated by DOT   |
|             | Containers ≥ 30 gallons | UN3082, Environmentally Hazardous Substances, Liquid, N.O.S., 9, PG III, RQ (2,4-D Salt) |

## 15. Regulatory information

### U.S. EPA Label Information

EPA Pesticide Registration Number 42750-92

EPA Pesticide Label DANGER! Corrosive. causes Irreversible Eye Damage. Harmful If Absorbed Through Skin or Inhaled. Harmful if Swallowed.

### International Inventories

|               |                 |
|---------------|-----------------|
| TSCA          | Does not comply |
| DSL/NDSL      | Does not comply |
| EINECS/ELINCS | Does not comply |

|       |                 |
|-------|-----------------|
| ENCS  | Does not comply |
| IECSC | Does not comply |
| KECL  | Does not comply |
| PICCS | Does not comply |
| AICS  | Does not comply |

**Legend:****TSCA** - United States Toxic Substances Control Act Section 8(b) Inventory**DSL/NDL** - Canadian Domestic Substances List/Non-Domestic Substances List**EINECS/ELINCS** - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances**ENCS** - Japan Existing and New Chemical Substances**IECSC** - China Inventory of Existing Chemical Substances**KECL** - Korean Existing and Evaluated Chemical Substances**PICCS** - Philippines Inventory of Chemicals and Chemical Substances**AICS** - Australian Inventory of Chemical Substances**US Federal Regulations****SARA 313**

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

**SARA 311/312 Hazard Categories**

Should this product meet EPCRA 311/312 Tier reporting criteria at 40 CFR 370, refer to Section 2 of this SDS for appropriate classifications.

**CWA (Clean Water Act)**

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).

**CERCLA**

This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302).

**US State Regulations****California Proposition 65**

This product does not contain any Proposition 65 chemicals.

**U.S. State Right-to-Know Regulations**

| Chemical name | New Jersey | Massachusetts | Pennsylvania |
|---------------|------------|---------------|--------------|
| Trade secret  | -          | -             | X            |
| 2,4-D         | X          | X             | X            |

**16. Other information****NFPA**

Health hazards 3

Flammability 1

Instability 0

Physical and chemical  
properties -**HMIS**

Health hazards 3 \*

Flammability 1

Physical hazards 0

Personal protection X

Chronic Hazard Star Legend

\* = Chronic Health Hazard

**Key or legend to abbreviations and acronyms used in the safety data sheet**



**Legend Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION**

|         |                             |      |                                  |
|---------|-----------------------------|------|----------------------------------|
| TWA     | TWA (time-weighted average) | STEL | STEL (Short Term Exposure Limit) |
| Ceiling | Maximum limit value         | *    | Skin designation                 |

**Key literature references and sources for data used to compile the SDS**

Agency for Toxic Substances and Disease Registry (ATSDR)  
 U.S. Environmental Protection Agency ChemView Database  
 European Food Safety Authority (EFSA)  
 EPA (Environmental Protection Agency)  
 Acute Exposure Guideline Level(s) (AEGL(s))  
 U.S. Environmental Protection Agency Federal Insecticide, Fungicide, and Rodenticide Act  
 U.S. Environmental Protection Agency High Production Volume Chemicals  
 Food Research Journal  
 Hazardous Substance Database  
 International Uniform Chemical Information Database (IUCLID)  
 Japan GHS Classification  
 Australia National Industrial Chemicals Notification and Assessment Scheme (NICNAS)  
 NIOSH (National Institute for Occupational Safety and Health)  
 National Library of Medicine's ChemID Plus (NLM CIP)  
 National Library of Medicine's PubMed database (NLM PUBMED)  
 National Toxicology Program (NTP)  
 New Zealand's Chemical Classification and Information Database (CCID)  
 Organization for Economic Co-operation and Development Environment, Health, and Safety Publications  
 Organization for Economic Co-operation and Development High Production Volume Chemicals Program  
 Organization for Economic Co-operation and Development Screening Information Data Set  
 World Health Organization

**Revision date** 09-Aug-2021

**Revision Note** No data available.

**Disclaimer**

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**End of Safety Data Sheet**