Parity™ Herbicide

 Version 5 / USA
 Revision Date: 12/05/2013

 102000000828
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SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

Product identifier

Trade name Parity™ Herbicide

 Product code (UVP)
 05939054

 SDS Number
 10200000828

 EPA Registration No.
 264-666-55467

Relevant identified uses of the substance or mixture and uses advised against

Use Herbicide

Restrictions on use See product label for restrictions.

Information on manufacturer

Tenkoz, Inc.

1725 Windward Concourse, Ste 410 Alpharetta, GA 30005 United States

Emergency telephone no.

All Emergencies, 24hr/ 7 days 1-800-424-9300

Product Information Telephone No.

SDS Information or Request

SECTION 2: HAZARDS IDENTIFICATION

Classification in accordance with regulation HCS 29CFR §1910.1200

Aspiration hazard : Category 1 Eye irritation : Category 2A Skin irritation : Category 2





Signal word: Danger

Hazard statements

May be fatal if swallowed and enters airways.

Causes serious eye irritation.

Causes skin irritation.

Precautionary statements

Wash thoroughly after handling.

Wear protective gloves and eye/face protection.

IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.

Do NOT induce vomiting.

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IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

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If eye irritation persists: Get medical advice/attention. IF ON SKIN: Wash with plenty of soap and water.

Specific measures (see supplemental first aid instructions on this label).

If skin irritation occurs: Get medical advice/attention. Take off contaminated clothing and wash before reuse.

Store locked up.

Dispose of contents/container in accordance with local regulation.

Other hazards

No other hazards known.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

| Hazardous Component Name | CAS-No. | Average % by Weight |
|---|-------------|---------------------|
| Fenoxaprop-P-ethyl | 71283-80-2 | 11.53 |
| Mefenpyr-diethyl | 135590-91-9 | 3.18 |
| Solvent Naphtha (petroleum), heavy aromatic | 64742-94-5 | 57.40 |
| Ethoxy (7) tridecanol | 78330-21-9 | 15.50 |
| Naphthalene | 91-20-3 | 8.10 |

SECTION 4: FIRST AID MEASURES

Description of first aid measures

General advice When possible, have the product container or label with you when

calling a poison control center or doctor or going for treatment.

Inhalation Move to fresh air. Keep patient warm and at rest. Call a physician or

poison control center immediately.

Skin contact Wash off thoroughly with plenty of soap and water, if available with

polyethyleneglycol 400, subsequently rinse with water. If symptoms

persist, call a physician.

Eye contact Rinse immediately with plenty of water, also under the eyelids, for at

least 15 minutes. Remove contact lenses, if present, after the first 5

minutes, then continue rinsing eye. If eye irritation or redness

persists, see an ophthalmologist.

Ingestion Rinse mouth. Do NOT induce vomiting. Call a physician or poison

control center immediately.

Most important symptoms and effects, both acute and delayed

Symptoms Headache, Nausea, Dizziness, Somnolence

Ingestion may cause gastrointestinal irritation, nausea, vomiting and

diarrhoea.

Aspiration may cause pulmonary oedema and pneumonitis.

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> Inhalation may provoke the following symptoms: Cough, Shortness of breath, Cyanosis, Fever

Indication of any immediate medical attention and special treatment needed

Risks Contains hydrocarbon solvents. May pose an aspiration pneumonia

hazard.

Treatment Treat symptomatically. Gastric lavage is not normally required.

> However, if a significant amount (more than a mouthful) has been ingested, administer activated charcoal and sodium sulphate. In case of aspiration intubation and bronchial lavage should be

considered. Monitor: kidney, liver and pancreas function. There is no

specific antidote. Contraindication: derivatives of adrenaline.

SECTION 5: FIREFIGHTING MEASURES

Extinguishing media

Suitable Water spray, Carbon dioxide (CO2), Foam, Sand

Unsuitable High volume water jet

Special hazards arising from the substance or

mixture

In the event of fire the following may be released:, Hydrogen chloride (HCI), Hydrogen cyanide (hydrocyanic acid), Carbon

monoxide (CO), Nitrogen oxides (NOx)

Advice for firefighters

Special protective

equipment for fire-fighters

In the event of fire and/or explosion do not breathe fumes. In the event of fire, wear self-contained breathing apparatus.

Keep out of smoke. Fight fire from upwind position. Remove product **Further information**

from areas of fire, or otherwise cool containers with water in order to avoid pressure being built up due to heat. Do not allow run-off from fire fighting to enter drains or water courses. Collect contaminated fire extinguishing water separately. This must not be discharged into

drains.

108 °C Flash point

Autoignition temperature no data available

Lower explosion limit no data available

Upper explosion limit no data available

Explosivity Not explosive

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SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Precautions Avoid contact with spilled product or contaminated surfaces. Use

personal protective equipment.

Methods and materials for containment and cleaning up

Methods for cleaning up Soak up with inert absorbent material (e.g. sand, silica gel, acid binder,

universal binder, sawdust). Clean contaminated floors and objects thoroughly, observing environmental regulations. Keep in suitable.

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closed containers for disposal.

Additional advice Do not allow to enter soil, waterways or waste water canal.

Reference to other sections Information regarding safe handling, see section 7.

Information regarding personal protective equipment, see section 8.

Information regarding waste disposal, see section 13.

SECTION 7: HANDLING AND STORAGE

Precautions for safe handling

Advice on safe handling Handle and open container in a manner as to prevent spillage. Use

only in area provided with appropriate exhaust ventilation. Maintain exposure levels below the exposure limit through the use of general

and local exhaust ventilation.

Advice on protection against fire and explosion

Keep away from heat and sources of ignition.

Hygiene measures Avoid contact with skin, eyes and clothing. Keep working clothes

separately. Wash hands immediately after work, if necessary take a shower. Remove soiled clothing immediately and clean thoroughly before using again. Garments that cannot be cleaned must be

destroyed (burnt).

Conditions for safe storage, including any incompatibilities

Requirements for storage areas and containers

Store in original container. Keep containers tightly closed in a dry, cool and well-ventilated place. Store in a place accessible by

authorized persons only.

Advice on common storage Keep away from food, drink and animal feedingstuffs.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

| Components | CAS-No. | Control parameters | Update | Basis |
|--------------------|------------|--------------------|--------|----------|
| Fenoxaprop-P-ethyl | 71283-80-2 | 2.6 mg/m3 | | OES BCS* |
| | | (TWA) | | |

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| Mefenpyr-diethyl | 135590-91-9 | 10 mg/m3 (OES BCS) | | OES BCS* |
|---|-------------|--------------------------------|---------|-----------|
| Solvent Naphtha (petroleum), heavy aromatic | 64742-94-5 | 2560 ug/m3460 ppm (ST ESL) | 10 2003 | TX ESL |
| Solvent Naphtha (petroleum), heavy aromatic | 64742-94-5 | 256 ug/m346 ppm (AN ESL) | 10 2003 | TX ESL |
| Naphthalene | 91-20-3 | 10 ppm (TWA) | | OES BCS* |
| Naphthalene | 91-20-3 | 10 ppm (TWA) | 02 2012 | ACGIH |
| Naphthalene | 91-20-3 | 15 ppm (STEL) | 02 2012 | ACGIH |
| Naphthalene | 91-20-3 | 10 ppm (TWA) | 02 2013 | ACGIH NIC |
| Naphthalene | 91-20-3 | 50 mg/m3 / 10 ppm (REL) | 2010 | NIOSH |
| Naphthalene | 91-20-3 | 75 mg/m3 / 15 ppm (STEL) | 2010 | NIOSH |
| Naphthalene | 91-20-3 | 50 mg/m3 / 10 ppm (PEL) | 02 2006 | OSHA Z1 |
| Naphthalene | 91-20-3 | 75 mg/m3 / 15 ppm (STEL) | 1989 | OSHA Z1A |
| Naphthalene | 91-20-3 | 50 mg/m3 / 10 ppm (TWA) | 1989 | OSHA Z1A |
| Naphthalene | 91-20-3 | 75 mg/m3 / 15 ppm (STEL) | 06 2008 | TN OEL |
| Naphthalene | 91-20-3 | 50 mg/m3 / 10 ppm (TWA) | 06 2008 | TN OEL |
| Naphthalene | 91-20-3 | 10 ppb (AN ESL) | 07 2011 | TX ESL |
| Naphthalene | 91-20-3 | 38 ppb (ST ESL) | 02 2013 | TX ESL |
| Naphthalene | 91-20-3 | 50 ug/m3 (AN ESL) | 07 2011 | TX ESL |
| Naphthalene | 91-20-3 | 200 ug/m3 (ST ESL) | 02 2013 | TX ESL |
| Naphthalene | 91-20-3 | 75 mg/m3 / 15 ppm (STEL) | 08 2010 | US CA OEL |
| Naphthalene | 91-20-3 | 50 mg/m3 / 10 ppm (TWA PEL) | 08 2010 | US CA OEL |

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Exposure controls

Personal protective equipment

In normal use and handling conditions please refer to the label and/or leaflet. In all other cases the following recommendations would apply.

Respiratory protection

When respirators are required, select NIOSH approved equipment based on actual or potential airborne concentrations and in

^{*}OES BCS: Internal Bayer CropScience "Occupational Exposure Standard"

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accordance with the appropriate regulatory standards and/or

industry recommendations.

Hand protection Chemical resistant nitrile rubber gloves

Eye protection Goggles

Skin and body protection Wear long-sleeved shirt and long pants and shoes plus socks.

General protective

measures

Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables, use detergent and warm/tepid

water.

Keep and wash PPE separately from other laundry.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance light yellow

Physical State Liquid

Odor aromatic

Odour Threshold no data available

pН 6.7 (1 %) emulsion in water

Vapor Pressure no data available

Vapor Density (Air = 1) no data available

1.03 g/cm3 at 20 °C **Density**

Evapouration rate no data available

Boiling Point no data available

Melting / Freezing Point no data available

emulsifiable Water solubility

Minimum Ignition Energy not applicable

Decomposition temperature

Stable under normal conditions.

Partition coefficient: n-

octanol/water

no data available

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Viscosity 10.1 mPa.s at 40 °C

Flash point 108 °C

Autoignition temperature no data available

Lower explosion limit no data available

Upper explosion limit no data available

Explosivity Not explosive

Other information Further safety related physical-chemical data are not known.

SECTION 10: STABILITY AND REACTIVITY

Reactivity

Thermal decomposition Stable under normal conditions.

Chemical stability Stable under recommended storage conditions.

Possibility of hazardous

reactions

No hazardous reactions when stored and handled according to

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prescribed instructions.

Conditions to avoid freezing

Heat, flames and sparks.

Incompatible materials Store only in the original container.

Hazardous decomposition

products

Thermal decomposition can lead to release of:

Carbon monoxide

Hydrogen chloride (HCI) Nitrogen oxides (NOx)

Sulphur oxides

SECTION 11: TOXICOLOGICAL INFORMATION

Exposure routes Eye contact, Skin contact, Inhalation, Ingestion

Immediate Effects

Eye Severe eye irritation.

Skin Severe skin irritation.

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Ingestion Harmful if swallowed.

Inhalation May be harmful if inhaled.

Information on toxicological effects

Acute oral toxicity LD50 (rat) 3,254 mg/kg

Acute inhalation toxicity LC50 (rat) > 5.4 mg/l

Exposure time: 4 h

Determined in the form of liquid aerosol.

LC50 (rat) > 21.6 mg/lExposure time: 1 h

Determined in the form of liquid aerosol.

Extrapolated from the 4 hr LC50.

Acute dermal toxicity LD50 (rat) > 5,000 mg/kg

Skin irritation Severe skin irritation. (rabbit)

Eye irritation Severe eye irritation. (rabbit)

Sensitisation Non-sensitizing. (guinea pig)

OECD Test Guideline 406, Buehler test

Assessment repeated dose toxicity

Fenoxaprop-P-ethyl did not cause specific target organ toxicity in rats. Fenoxaprop-P-ethyl caused specific target organ toxicity in experimental animal studies in mice in the following organ(s): kidnevs.

Mefenpyr-diethyl did not cause specific target organ toxicity in experimental animal studies.

Assessment Mutagenicity

Fenoxaprop-P-ethyl was not mutagenic or genotoxic in a battery of in vitro and in vivo tests. Mefenpyr-diethyl was not mutagenic or genotoxic in a battery of in vitro and in vivo tests.

Assessment Carcinogenicity

Fenoxaprop-P-ethyl demonstrated no carcinogenic potential in a lifetime feeding study in rats. Fenoxaprop-P-ethyl caused an increased incidence of liver tumours in mice at high doses. Fenoxaprop-P-ethyl causes tumours through peroxisome proliferation. The mechanism that triggers tumours in rodents and the type of tumours observed are not relevant to humans. Mefenpyr-diethyl was not carcinogenic in lifetime feeding studies in rats and mice. This product contains ≥ 1% naphthalene. Naphthalene caused an increased incidence of tumours after chronic inhalation of high vapour concentrations in the following organ: Respiratory Tract. The tumours seen with naphthalene were caused through a non-genotoxic mechanism, which is not relevant at low doses.

ACGIH

Naphthalene Group A4 91-20-3

NTP

91-20-3 Naphthalene

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IARC

Naphthalene 91-20-3 Overall evaluation: 2B

OSHA

None.

Assessment toxicity to reproduction

Fenoxaprop-P-ethyl did not cause reproductive toxicity in a two-generation study in rats. Mefenpyr-diethyl did not cause reproductive toxicity in a two-generation study in rats.

Assessment developmental toxicity

Fenoxaprop-P-ethyl did not cause developmental toxicity in rats and rabbits. Mefenpyr-diethyl caused developmental toxicity only at dose levels toxic to the dams. The developmental effects seen with Mefenpyr-diethyl are related to maternal toxicity.

Further information

Only acute toxicity studies have been performed on the formulated product. The non-acute information pertains to the active ingredient(s).

SECTION 12: ECOLOGICAL INFORMATION

Toxicity to fish LC50 (Rainbow trout (Oncorhynchus mykiss)) 1.9 mg/l

Exposure time: 96 h

Test conducted with a similar formulation.

Toxicity to aquatic

invertebrates

EC50 (Water flea (Daphnia magna)) 4.2 mg/l

Exposure time: 48 h

Test conducted with a similar formulation.

EC50 (Pseudokirchneriella subcapitata) 1.47 mg/l Toxicity to aquatic plants

Exposure time: 72 h

Test conducted with a similar formulation.

Biodegradability Fenoxaprop-P-ethyl: not rapidly biodegradable

Mefenpyr-diethyl: not rapidly biodegradable

Fenoxaprop-P-ethyl: Koc:11354 Koc

Mefenpyr-diethyl: Koc:625

Bioaccumulation Fenoxaprop-P-ethyl: Bioconcentration factor (BCF) 338

Does not bioaccumulate.

Mefenpyr-diethyl: Bioconcentration factor (BCF) 232

Does not bioaccumulate.

Mobility in soil Fenoxaprop-P-ethyl: Immobile in soil

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Mefenpyr-diethyl: Slightly mobile in soils

Additional ecological

information

No other effects to be mentioned.

Environmental precautions Drift or runoff from treated areas may adversely affect non-target

plants.

Do not apply directly to water, to areas where surface water is present or to intertidal areas below the mean high water mark. Do not contaminate surface or ground water by cleaning equipment

or disposal of wastes, including equipment wash water.

Apply this product as specified on the label.

SECTION 13: DISPOSAL CONSIDERATIONS

Waste treatment methods

Product Dispose in accordance with all local, state/provincial and federal

regulations.

Follow advice on product label and/or leaflet.

Contaminated packaging Triple rinse containers.

Add washings to sprayer at time of filling.

Do not re-use empty containers. Puncture container to avoid re-use.

Follow advice on product label and/or leaflet.

RCRA Information Characterization and proper disposal of this material as a special or

> hazardous waste is dependent upon Federal, State and local laws and are the user's responsibility. RCRA classification may apply.

SECTION 14: TRANSPORT INFORMATION

49CFR

UN number 3082 Class 9 Packaging group Ш

Marine pollutant Marine pollutant

Proper shipping name ENVIRONMENTALLY HAZARDOUS SUBSTANCES, LIQUID,

N.O.S.

(FENOXAPROP-P-ETHYL, NAPHTHALENE)

RQ Reportable Quantity is reached with 1,234 lb of product.

IMDG

UN number 3082 Class 9 Packaging group Ш

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Marine pollutant YES

Proper shipping name ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID,

N.O.S.

(FENOXAPROP-P-ETHYL SOLUTION)

IATA

UN number 3082 Class Packaging group Ш Environm. Hazardous Mark YES

Proper shipping name ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID,

N.O.S.

(FENOXAPROP-P-ETHYL SOLUTION)

This transportation information is not intended to convey all specific regulatory information relating to this product. It does not address regulatory variations due to package size or special transportation requirements.

Freight Classification: COMPOUNDS, TREE OR WEEDKILLING, N.O.I., other than

poison; HAVING A DENSITY OF GREATER THAN 20 LBS.

PER CUBIC FOOT

SECTION 15: REGULATORY INFORMATION

EPA Registration No. 264-666-55467

US Federal Regulations

TSCA list

Solvent Naphtha (petroleum), heavy 64742-94-5

aromatic

Ethoxy (7) tridecanol 78330-21-9 Naphthalene 91-20-3

US. Toxic Substances Control Act (TSCA) Section 12(b) Export Notification (40 CFR 707,

Subpt D) None.

SARA Title III - Section 302 - Notification and Information

None.

SARA Title III - Section 313 - Toxic Chemical Release Reporting

91-20-3 0.1% Naphthalene

US States Regulatory Reporting

CA Prop65

This product contains a chemical known to the State of California to cause cancer.

Naphthalene 91-20-3

This product does not contain any substances known to the State of California to cause reproductive harm.

US State Right-To-Know Ingredients

Naphthalene 91-20-3 CA, CT, MN, NJ

Canadian Regulations

Canadian Domestic Substance List

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Solvent Naphtha (petroleum), heavy 64742-94-5

aromatic

Ethoxy (7) tridecanol 78330-21-9 Naphthalene 91-20-3

Environmental

CERCLA

Naphthalene 91-20-3 100 lbs

Clean Water Section 307 Priority Pollutants

Safe Drinking Water Act Maximum Contaminant Levels

None.

International Regulations

European Inventory of Existing Commercial Substances (EINECS)

Solvent Naphtha (petroleum), heavy 64742-94-5

aromatic

Naphthalene 91-20-3

EPA/FIFRA Information:

This chemical is a pesticide product registered by the Environmental Protection Agency and is subject to certain labeling requirements under federal pesticide law. These requirements differ from the classification criteria and hazard information required for safety data sheets, and for workplace labels of non-pesticide chemicals. Following is the hazard information required on the pesticide label:

Signal word: Warning!

Causes substantial but temporary eye injury. **Hazard statements:**

Causes skin irritation. Harmful if swallowed.

Do not get in eyes, on skin, or on clothing.

Wash thoroughly with soap and water after handling.

SECTION 16: OTHER INFORMATION

NFPA 704 (National Fire Protection Association):

Health - 2 Flammability - 1 Instability - 0 Others - none

HMIS (Hazardous Materials Identification System, based on the Third Edition Ratings Guide)

Flammability - 1 Physical Hazard - 0 PPE -Health - 2

0 = minimal hazard, 1 = slight hazard, 2 = moderate hazard, 3 = severe hazard, 4 = extreme hazard

Reason for Revision: Revised according to the current OSHA Hazard Communication Standard (29CFR1910.1200)

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This information is provided in good faith but without express or implied warranty. The customer assumes

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all responsibility for safety and use not in accordance with label instructions. Parity is a trademark of Tenkoz, Inc..

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