



MATERIAL SAFETY DATA SHEET

Comma SC

IDENTIFICATION OF THE SUPPLIER:

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PRODUCT IDENTIFICATION:

Common Name: Pyrimethanil
Trade Name: Comma SC
Uses category: Fungicide
Type of formulation: Suspension concentrate (SC)
Chemical Name: 4, 6-dimethyl-N-phenyl-2-pyrimidinamine.
Chemical Formula: C₁₂H₁₃N₃
Molecular Weight: 199.3

PRODUCT COMPOSITION:

Active Ingredient:	CAS #	g/l
Pyrimethanil	[53112-28-0]	400

Inert ingredient: Up to 100%





HAZARDS IDENTIFICATION:

Classified in accordance with Part 2 of the Hazardous Products Regulations
This material is not hazardous under the criteria of Part 2 of the Hazardous Products Regulation.

Hazards Not Otherwise Classified (HNOC) No physical hazards not otherwise classified. No health hazards not otherwise classified.

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. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth if possible. Call a physician or poison control center immediately.

Skin contact Take off contaminated clothing and shoes immediately. Wash off immediately with plenty of water for at least 15 minutes. Call a physician or poison control center immediately.

Eye contact Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a physician or poison control center immediately.

Ingestion Call a physician or poison control center immediately. Rinse out mouth and give water in small sips to drink. DO NOT induce vomiting unless directed to do so by a physician or poison control center. Never give anything by mouth to an unconscious person. Do not leave victim unattended.

Most important symptoms and effects, both acute and delayed

Symptoms to date no symptoms are known.

Indication of any immediate medical attention and special treatment needed

Treatment Appropriate supportive and symptomatic treatment as indicated by the patient's condition is recommended. There is no specific antidote.



FIRE-FIGHTING MEASURES: -

Extinguishing media

Suitable Water spray, Foam, Dry chemical, Carbon dioxide (CO₂)

Unsuitable None known

Special hazards arising from the substance or mixture

Dangerous gases are evolved in the event of a fire.

Advice for firefighters

Special protective equipment for firefighters

Firefighters should wear NIOSH approved self-contained breathing apparatus and full protective clothing.

Further information Keep out of smoke. Fight fire from upwind position. Cool closed containers exposed to fire with water spray. Do not allow run-off from firefighting to enter drains or water courses

Flash point No data available

Auto-ignition temperature No data available

Lower explosion limit No data available

Upper explosion limit No data available

Explosivity Not applicable

ACCIDENTAL RELEASE MEASURE:

Personal precautions, protective equipment and emergency procedures

Precautions: Isolate hazard area. Keep unauthorized people away. Avoid contact with spilled product or contaminated surfaces.

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). Collect and transfer the product into a properly labelled and tightly closed container. Clean





contaminated floors and objects thoroughly, observing environmental regulations.

Additional advice Use personal protective equipment. If material is accidentally spilled, do not allow to enter soil, waterways or waste water canal.

PERSONAL PROTECTION/SAFTETY:

Control parameters

Components	CAS-No.	Control parameters	Update	Basis
Pyrimethanil	53112-28-0	5.6 mg/m ³ (TWA)		OES BCS*
1,2-Propanediol (Aerosol.)	57-55-6	10 mg/m ³ (TWA)	11 2010	CAD ON OEL
1,2-Propanediol (Vapor and aerosol.)	57-55-6	155 mg/m ³ /50 ppm (TWA)	06 2015	CAD ON OEL

*OES BCS: Internal Bayer AG, Crop Science Division "Occupational Exposure Standard"

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 accordance with the appropriate regulatory standards and/or industry recommendations.

Hand protection Chemical resistant nitrile rubber gloves

Eye protection Safety glasses with side-shields

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.





HANDLING AND STORAGE:

Precautions for safe handling

Advice on safe handling Handle and open container in a manner as to prevent spillage. Maintain exposure levels below the exposure limit through the use of general and local exhaust ventilation.

Hygiene measures Wash hands thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco, using the toilet or applying cosmetics.

Remove Personal Protective Equipment (PPE) immediately after handling this product. Before removing gloves clean them with soap and water. Remove soiled clothing immediately and clean thoroughly before using again. Wash thoroughly and put on clean clothing.

Conditions for safe storage, including any incompatibilities

Conditions for safe storage, including any incompatibilities

Requirements for storage areas and containers

Store in a cool, dry place and in such a manner as to prevent cross contamination with other crop protection products, fertilizers, food, and feed. Store in original container and out of the reach of children, preferably in a locked storage area. Protect from freezing.

STABILITY AND REACTIVITY:

Conditions to Avoid Freezing

Incompatibility Organic materials

Hazardous Reactions No hazardous reactions when stored and handled according to prescribed instructions.

Stable under recommended storage conditions.

PHYSICAL AND CHEMICAL PROPERTIES:

Physical State liquid suspension

Odor slight

Appearance off-white

Density 1.10 g/cm³ at 20 °C

Water solubility dispersible

Viscosity 500 - 1,000 mPa.s



TOXICOLOGICAL INFORMATION:

Exposure routes Immediate Effects Inhalation, Skin Absorption, Eye contact, Ingestion

Eye	Causes eye irritation.
Skin	Harmful if absorbed through skin. Irritating to skin.
Inhalation	Harmful if inhaled.
Information on toxicological effects	
Acute oral toxicity	LD50 (Rat) > 5,000 mg/kg
Acute inhalation toxicity	LC50 (Rat) > 1.26 mg/l Exposure time: 4 h Determined in the form of liquid aerosol. Highest attainable concentration. No deaths
Acute dermal toxicity	LD50 (Rat) > 4,000 mg/kg
Skin irritation	Moderate skin irritation. (Rabbit)
Eye irritation	Minimally irritating. (Rabbit)
Sensitisation	Non-sensitizing. (Guinea pig)

Assessment STOT Specific target organ toxicity – repeated exposure

Pyrimethanil did not cause any significant specific adverse effects or target organ toxicity in subacute toxicity studies.

Assessment mutagenicity

Pyrimethanil was not mutagenic or genotoxic in a battery of in vitro and in vivo tests.

Assessment carcinogenicity

Pyrimethanil was not carcinogenic in lifetime feeding studies in mice. Pyrimethanil caused at high levels an increased incidence of tumours in rats in the following organ(s): Thyroid. The mechanism triggers tumours in rodents and the type of tumours observed are not relevant to humans.

ACGIH

None.

NTP

None.

IARC

None.

OSHA

None.

Assessment toxicity to reproduction

Pyrimethanil did not cause reproductive toxicity in a two-generation study in rats.

Assessment developmental toxicity

Pyrimethanil did not cause developmental toxicity in rats and rabbits.





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

ECOLOGICAL INFORMATION: -

Toxicity to fish LC50 (Oncorhynchus mykiss (rainbow trout)) 10.56 mg/l
Exposure time: 96 h

The value mentioned relates to the active ingredient pyrimethanil.

Toxicity to aquatic invertebrates EC50 (Daphnia magna (Water flea)) 2.9 mg/l
Exposure time: 48 h The value mentioned relates to the active ingredient pyrimethanil.

Toxicity to aquatic plants IC50 (Raphidocelis subcapitata (freshwater green alga)) 1.2 mg/l
Exposure time: 96 h The value mentioned relates to the active ingredient pyrimethanil.

Biodegradability Pyrimethanil: Not rapidly biodegradable

Koc Pyrimethanil: Koc: 301

Bioaccumulation Pyrimethanil: Does not bioaccumulate

Mobility in soil Pyrimethanil: Moderately mobile in soils

Environmental precautions Do not allow to get into surface water, drains and ground water. Do not contaminate surface or ground water by cleaning equipment or disposal of wastes, including equipment wash water. Drift and runoff from treated areas may be hazardous to aquatic organisms in adjacent sites. Apply this product as specified on the label.

DISPOSAL CONSIDERATIONS:

Waste treatment methods Product

Follow container label instructions for disposal of wastes generated during use in compliance with the product label. Dispose in accordance with all local, state/provincial and federal regulations





Contaminated packaging

Triple rinse containers. Puncture container to avoid re-use. Dispose of empty container in a sanitary landfill or by incineration, or, if allowed by State/Provincial and local authorities, by burning. If burned, stay out of smoke.

