SAFETY DATA SHEET (SDS)	
TITLE:	**CIBA MIX EXTRA**

1.0 IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY / UNDERTAKING

1.1 Product Identifier

Product Name	:	CIBA MIX EXTRA
Common Name	:	Mesosulfuron Methyl 7.5g/l + Iodosulfuron-methyl 2.5g/l + Mefenpyr- Diethyl 22.5g/l + Diflufenican 50g/l Oil Dispersion (OD)
EC No.	:	N/A
Index Number	:	N/A
REACH registration No.	:	N/A

1.2 Relevant identified uses of the substance and uses advised against:

herbicide

1.3 Details of the Manufacturer / Supplier of the safety data sheet:

Supplier	CIBA AGRIPHARMA SARL 78 Boulevard Haussmann 75008 Paris , France
Tel	Tel: +33 6 51 39 90 00
E-mail	administration@ciba- agripharma.com
Webpage	www. ciba- agripharma.com

1.1 Emergency Phone Number (24 hours)

+33 6 51 39 90 00

2.0 HAZARDS IDENTIFICATION

2.1 Classification of the mixture:

Skin irritation: Category 2
H315 Causes skin irritation.

Serious eye damage: Category 1
H318 Causes serious eye damage.

Skin sensitisation: Category 1A
H317 May cause an allergic skin reaction.

Germ cell mutagenicity: Category 1
H340 May cause genetic defects.

Carcinogenicity: Category 1
H350 May cause cancer.

Aspiration hazard: Category 1
H304 May be fatal if swallowed and enters airways. Acute aquatic toxicity: Category 1
H400 Very toxic to aquatic life.

Chronic aquatic toxicity: Category 1
H410 Very toxic to aquatic life with long lasting effects.

2.2 Label elements

Hazard label for supply/use required.

Hazardous components which must be listed on the label:

Mesosulfuron-methyl
Mefenpyr-diethyl
Solvent Naphtha (petroleum), heavy aromatic
Solvent Naphtha (petroleum), light aromatic

Signal word: Danger

Hazard statements

H315 Causes skin irritation.
H318 Causes serious eye damage.
H317 May cause an allergic skin reaction.
H340 May cause genetic defects.
H350 May cause cancer.
H304 May be fatal if swallowed and enters airways.
Precautionary statements

P202 Do not handle until all safety precautions have been read and understood.
P261 Avoid breathing mist/ spray.
P264 Wash hands thoroughly after handling.
P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.
P301 + P310 IF SWALLOWED: Immediately call a POISON CENTER/doctor/ physician.
P331 Do NOT induce vomiting.
P302 + P352 IF ON SKIN: Wash with plenty of water/ soap.
P333 + P313 If skin irritation or rash occurs: Get medical advice/ attention.
P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P310 Immediately call a POISON CENTER/doctor/ physician.
P308 + P313 IF exposed or concerned: Get medical advice/ attention.
P362 Take off contaminated clothing and wash before reuse.
P405 Store locked up.
P501 Dispose of contents/container in accordance with local regulation.

2.3 Other hazards

No other hazards known

3.0 COMPOSITION/INFORMATION ON INGREDIENTS

Chemical name	CAS-No.	Concentration [%]
Mefenpyr-diethyl	135590-91-9	2.25
Mesosulfuron-methyl	208465-21-8	0.75
Diflufenican	83164-33-4	5
Iodosulfuron -methyl	144550-36-7	0.25
Docusate sodium	577-11-7	< 7.00
Solvent Naphtha (petroleum), light aromatic	64742-95-6	>= 1.00 - <= 5.00
Calcium diformate	544-17-2	< 1.00
Other ingredients (non-hazardous) to 100%		

4.0 FIRST AID MEASURES

4.1 Description of first aid measures

4.1.1 General information

Never give fluids or induce vomiting if patient is unconscious or is having convulsions.

4.1.2 In case of inhalation

Remove to fresh air if effects occur. Consult a physician

4.1.3 In case of skin contact

Wash off in flowing water or shower

4.1.4 In case of eyes contact

Flush eyes with plenty of water.

4.1.5 In case of ingestion

If swallowed, seek medical attention. Do not induce vomiting unless directed to do so by medical personnel.

4.1.6 Notes for the doctor

No specific antidote. Supportive care. Treatment based on judgment of the physician in response to reactions of the patient.

5.0 FIRE – FIGHTING MEASURES

5.1 Extinguishing media

Suitable extinguishing media	:	Water, fog, foam, CO_2
Unsuitable extinguishing media	:	N/A

5.2 Special hazards arising from the substance or mixture

Hazardous combustion products	:	Toxic and irritating gases will be formed if product is involved in fire.

5.3 Advice for fire-fighters

Wear positive-pressure, self-contained breathing apparatus and full protective clothing.

5.4 Additional information

N/A

6.0 ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

6.1.1 For non-emergency personnel

Protective equipment	:	Wear appropriate safety clothing and eye/face protection.
Emergency procedures	:	N/A

6.1.2 For emergency responders

Personal protective equipments	:	Wear appropriate safety clothing and eye/face protection

6.2 Environmental precautions

N/A

6.3 Methods and material for containment and cleaning up

6.3.1 For containment

N/A

6.3.2 For cleaning up

Sweep up small spills and place in a suitable container for disposal.

6.3.3 Other information

Not available

6.4 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 information on disposal.

7.0 HANDLING AND STORAGE

7.1 Precautions for safe handling

7.1.1 Protective measures

Fire preventions	:	See section 5.3
Aerosol and dust generation preventions	:	See section 6.1.
Environmental precautions	:	See section 6.2.

7.1.2 Advice on general occupational by hygiene

Use good personal hygiene. Do not consume or store food in the work area. Wash hands and exposed skin before eating, drinking or smoking and after work. Avoid contact with eyes, clothing and skin.

7.2 Conditions for safe storage, including any incompatibilities

Technical measures and storage conditions	:	Store in original container in a dry area.
Packaging materials	:	Store in the original container only.
Requirements for storage rooms and vessels	:	Store in a dry area.
Hints on storage assembly	:	N/A
Further information on storage conditions	:	Keep out of reach of children.

7.3 Specific and use(s

Recommendations	:	Avoid contact with eyes, skin, and clothing. Wash thoroughly after handling.

Industrial sector specific solutions : N/A

8.0 EXPOSURE CONTROL/PERSONAL PROTECTION

8.1 Control parameters

Components	CAS-No.	Control parameters	Update	Basis
Mesosulfuron-methyl	208465-21-8	10 mg/m3 (TWA)		OES BCS*
Mefenpyr-diethyl	135590-91-9	10 mg/m3 (TWA)		OES BCS*
Naphthalene	91-20-3	79 mg/m3/15 ppm		
(STEL)	12 2011	AU NOEL		
Naphthalene	91-20-3	52 mg/m3/10 ppm		
(TWA)	12 2011	AU NOEL		
Naphthalene	91-20-3	10 ppm		
(TLV)		OES BCS*		

8.2 Exposure controls

Respiratory protection	Respiratory protection is not required under anticipated circumstances of exposure.

Respiratory protection should only be used to control residual risk of short duration activities, when all reasonably practicable steps have been taken to reduce exposure at source e.g. containment and/or local extract ventilation. Always follow respirator manufacturer's

instructions regarding wearing and maintenance.

Hand protection Please observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves. Also take into consideration the specific local conditions under which the product is used, such as the danger of cuts, abrasion, and the

contact time.

Wash gloves when contaminated. Dispose of when contaminated inside, when perforated or when contamination on the outside cannot be removed. Wash hands frequently and always before eating, drinking, smoking or using the toilet.

Material	Nitrile rubber
Rate of permeability	> 480 min
Glove thickness	> 0.4 mm
Protective index	Class 6

Directive	Protective gloves complying with EN
374.	
Eye protection	Wear goggles (conforming to EN166, Field of Use = 5 or equivalent).

Skin and body protection	Wear standard coveralls and Category 3 Type 4 suit.

If there is a risk of significant exposure, consider a higher protective type suit.

Wear two layers of clothing wherever possible. Polyester/cotton or cotton overalls should be worn under chemical protection suit and should be professionally laundered frequently.

If chemical protection suit is splashed, sprayed or significantly contaminated, decontaminate as far as possible, then carefully remove and dispose of as advised by manufacturer.

General protective measures	In normal use and handling conditions please refer to the label and/or leaflet. In all other cases the above mentioned recommendations would apply.

9.0 PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Form	Liquid
Colour	yellow to brown
Odour	aromatic
Odour Threshold	No data available
pH	5.5 - 7.5 (10 %) (23 °C) (deionized water)
Melting point/range	No data available
Boiling Point	No data available
Flash point	94 °C
Flammability	No data available
Auto-ignition temperature	No data available
Ignition temperature	435 °C
Minimum ignition energy	No data available
Self-accelarating	No data available

9.2 Other information

Further safety related physical-chemical data are not known

10.0 STABILITY AND RELIABILITY

10.1 Reactivity

Not available

10.2 Chemical stability

Product is stable under normal storage conditions

10.3 Possibility of hazardous reactions

Hazardous Polymerization is not known to occur.

10.4 Conditions to avoid

If product is involved in fire, carbon monoxide and carbon dioxide, the normal products of combustion, will be formed, along with unidentified organic compounds.

10.5 Incompatible materials

None known

10.6 Hazardous decomposition products

If product is involved in fire, carbon monoxide and carbon dioxide, the normal products of combustion, will be formed, along with unidentified organic compounds.

11.0 TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Acute oral toxicity	LD50 (Rat) > 5,000 mg/kg
Acute inhalation toxicity	LC50 (Rat) > 1.33 mg/l

Exposure time: 4 h

Highest attainable concentration.

The value mentioned relates to the active ingredient mesosulfuron- methyl.

Acute dermal toxicity	LD50 (Rat) > 2,000 mg/kg

Skin corrosion/irritation

Serious eye damage/eye irritation

Respiratory or skin sensitisation

Assessment mutagenicity

Irritating to skin (Rabbit)

Risk of serious damage to eyes (Rabbit)

Skin: Sensitising (Guinea pig)

OECD Test Guideline 429, local lymph node assay (LLNA)

Mefenpyr-diethyl was not mutagenic or genotoxic in a battery of in vitro and in vivo tests. Mesosulfuron-methyl was not mutagenic or genotoxic in a battery of in vitro and in vivo tests.

Assessment carcinogenicity

Mefenpyr-diethyl was not carcinogenic in lifetime feeding studies in rats and mice. Mesosulfuron-methyl was not carcinogenic in lifetime feeding studies in rats and mice.

Assessment toxicity to reproduction

Mefenpyr-diethyl did not cause reproductive toxicity in a two-generation study in rats. Mesosulfuron-methyl did not cause reproductive toxicity in a two-generation study in rats.

Assessment developmental toxicity

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. Mesosulfuron-methyl did not cause developmental toxicity in rats and rabbits.

Assessment STOT Specific target organ toxicity – single exposure Mefenpyr-diethyl: Based on available data, the classification criteria are not met. Mesosulfuron-methyl: Based on available data, the classification criteria are not met. Assessment STOT Specific target organ toxicity – repeated exposure

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

Mesosulfuron-methyl did not cause specific target organ toxicity in experimental animal studies.

12.0 ECOLOGICAL INFORMATION

12.1 Toxicity

Toxicity to fish LC50 (Oncorhynchus mykiss (rainbow trout)) 3.2 mg/l

Exposure time: 96 h

Toxicity to aquatic invertebrates

EC50 (Daphnia magna (Water flea)) 3.4 mg/l

Exposure time: 48 h

Toxicity to aquatic plants EC50 (Raphidocelis subcapitata (freshwater green alga)) 2.96 mg/l

Exposure time: 72 h

EC50 (Lemna gibba (gibbous duckweed)) 50.7 µg/l

Growth rate; Exposure time: 7 d

Toxicity to other organisms LD50 (Colinus virginianus (Bobwhite quail)) > 2,000 mg/kg

The value mentioned relates to the active ingredient mesosulfuron- methyl.

LD50 (Anas platyrhynchos (Mallard duck)) > 2,000 mg/kg

12.2 Persistence and degradability

Biodegradability Mesosulfuron-methyl:

Not rapidly biodegradable

Mefenpyr-diethyl:

Not rapidly biodegradable

Koc Mesosulfuron-methyl: Koc: 92

Mefenpyr-diethyl: Koc: 625

12.3 Bioaccumulative potential

Bioaccumulation Mesosulfuron-methyl: Does not bioaccumulate.

Mefenpyr-diethyl: Bioconcentration factor (BCF) 232

Does not bioaccumulate.

12.4 Mobility in soil

Mobility in soil Mesosulfuron-methyl: Moderately mobile in soils

Mefenpyr-diethyl: Slightly mobile in soils

12.5 Other adverse effects

Additional ecological information

No other effects to be mentioned.

13.0 DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

See section 6.3.2.

13.2 Product / Packaging disposal

13.2.1 Product waste disposal

Dispose of washings, contaminated materials, used absorbents, and other waste material is directed by local regulations. Improper disposal of excess waste is a violation of law. If excess waste cannot be disposed of according to label instructions, contact your country's pesticide or environmental control agency.

13.2.2 Packing waste disposal

Container and washings must be disposed of safely and in accordance with applicable regulations. The preferred options are to send to licensed reclaimer or to permitted incinerators. Do not re-use container for any purpose.

14.0 TRANSPORT INFORMATION

ADG

UN number 3082

Transport hazard class(es) 9

Subsidiary Risk None

Packaging group III

Description of the goods ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.

(MESOSULFURON-METHYL, SOLVENT NAPHTHA (PETROLEUM) HEAVY AROMATIC SOLUTION)

Hazchem Code •3Z

AU01: Environmentally Hazardous Substances meeting the descriptions of UN 3077 or UN 3082 are not subject to this Code when transported by road or rail in; a) packagings that do not incorporate a receptacle exceeding 500 kg(L); Or b) IBCs

IMDG

UN number 3082

Transport hazard class(es) 9

Subsidiary Risk None Packaging group III Marine pollutant YES

Description of the goods ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.

(MESOSULFURON-METHYL, SOLVENT NAPHTHA (PETROLEUM) HEAVY AROMATIC SOLUTION)

IATA

UN number **3082**

Transport hazard class(es) 9

Subsidiary Risk None Packaging group III Environm.

Hazardous Mark YES

Description of the goods ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (MESOSULFURON-METHYL, SOLVENT NAPHTHA (PETROLEUM) HEAVY AROMATIC SOLUTION)

15.0 REGULATORY INFORMATION

15.1.	**Safety, health and environmental regulations/legislation specific for the substance or mixture**	Seveso category (Dir. 2012/18/EU): dangerous for the environment. All ingredients are covered by EU chemical legislation.

15.2. **Chemical safety assessment** ..... A chemical safety assessment is not required to be included for this product.

16.0 OTHER INFORMATION

The information contained herein relates only to the specified material identified. CIBA AGRIPHARMA believes that such information is accurate and reliable as of the data of this material safety data sheet, but no representation, guarantee or warranty, expressed or implied, is made as to the accuracy, reliability, or completeness of the information. CIBA AGRIPHARMA urges persons receiving this information to make their own determination as to the information's suitability and completeness for their particular application.