Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product form : Mixture Product name : Ad-Max 90 [™] Product code : M77709

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

1.3. Details of the supplier of the safety data sheet

JR Simplot Company Boise, ID 83707 T 1-208-336-2110

1.4. Emergency telephone number

Emergency number : CHEMTREC 1-800-424-9300

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification (GHS-US)

Acute Tox. 4 (Oral) H302 Acute Tox. 4 (Inhalation) H332 Skin Irrit. 2 H315 Eye Irrit. 2B H320

Full text of H-phrases: see section 16

2.2. Label elements

GHS-US labeling

Hazard pictograms (GHS-US)



GHS07

Signal word (GHS-US) : Warning

Hazard statements (GHS-US) : H302+H332 - Harmful if swallowed or if inhaled

H315 - Causes skin irritation H320 - Causes eye irritation

Precautionary statements (GHS-US) : P261 - Avoid breathing dust/fume/gas/mist/vapors/spray

P264 - Wash ... thoroughly after handling

P270 - Do not eat, drink or smoke when using this product P271 - Use only outdoors or in a well-ventilated area

P280 - Wear protective gloves/protective clothing/eye protection/face protection P301+P312 - If swallowed: Call a poison center/doctor/... if you feel unwell

P302+P352 - If on skin: Wash with plenty of water/...

P304+P340 - If inhaled: Remove person to fresh air and keep comfortable for breathing

P305+P351+P338 - If in eyes: Rinse cautiously with water for several minutes. Remove contact

lenses, if present and easy to do. Continue rinsing P312 - Call a poison center/doctor/... if you feel unwell P321 - Specific treatment (see ... on this label)

P330 - Rinse mouth

P332+P313 - If skin irritation occurs: Get medical advice/attention P337+P313 - If eye irritation persists: Get medical advice/attention P362 - Take off contaminated clothing and wash before reuse

P501 - Dispose of contents/container to ...

2.3. Other hazards

No additional information available

09/05/2014 EN (English US) Page 1

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

2.4. Unknown acute toxicity (GHS-US)

No data available

SECTION 3: Composition/information on ingredients

3.1. Substance

Not applicable

3.2. Mixture

| Name | Product identifier | % | Classification (GHS-US) |
|-------------------------------|--------------------|-------|--|
| 1,2,3-Propanetriol | (CAS No) 56-81-5 | <= 90 | Eye Irrit. 2B, H320 |
| Alkyl phenol ethoxylate * | | <= 90 | Skin Irrit. 2, H315 Eye Irrit. 2B, H320 |
| Dimethylbenzenesulfonic acid* | | <= 90 | Eye Irrit. 2B, H320 |

^{*}Chemical name, CAS number and/or exact concentration have been withheld as a trade secret

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general : Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice

(show the label where possible).

First-aid measures after inhalation : Assure fresh air breathing. Allow the victim to rest.

First-aid measures after skin contact : Wash with plenty of soap and water. Wash contaminated clothing before reuse. If skin irritation

occurs: Get medical advice/attention. Specific treatment (see ... on this label).

First-aid measures after eye contact : IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present

and easy to do. Continue rinsing.

First-aid measures after ingestion : Rinse mouth. Do NOT induce vomiting. Obtain emergency medical attention. Call a POISON

CENTER/doctor/physician if you feel unwell.

4.2. Most important symptoms and effects, both acute and delayed

Symptoms/injuries after skin contact : Causes skin irritation.
Symptoms/injuries after eye contact : Causes eye irritation.

Symptoms/injuries after ingestion : Swallowing a small quantity of this material will result in serious health hazard.

4.3. Indication of any immediate medical attention and special treatment needed

No additional information available

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media : Foam. Dry powder. Carbon dioxide. Water spray. Sand.

Unsuitable extinguishing media : Do not use a heavy water stream.

5.2. Special hazards arising from the substance or mixture

No additional information available

5.3. Advice for firefighters

Firefighting instructions : Use water spray or fog for cooling exposed containers. Exercise caution when fighting any

chemical fire. Prevent fire-fighting water from entering environment.

Protection during firefighting : Do not enter fire area without proper protective equipment, including respiratory protection.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

Emergency procedures : Evacuate unnecessary personnel.

6.1.2. For emergency responders

Protective equipment : Equip cleanup crew with proper protection.

Emergency procedures : Ventilate area.

6.2. Environmental precautions

Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters.

09/05/2014 EN (English US) 2/7

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

6.3. Methods and material for containment and cleaning up

Methods for cleaning up : Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. Collect

spillage. Store away from other materials.

6.4. Reference to other sections

See Heading 8. Exposure controls and personal protection.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Wash hands and other exposed areas with mild soap and water before eating, drinking or

smoking and when leaving work. Provide good ventilation in process area to prevent formation of

vapor.

Hygiene measures : Do not eat, drink or smoke when using this product. Wash ... thoroughly after handling.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Keep only in the original container in a cool, well ventilated place away from : Keep container

closed when not in use.

Incompatible products : Strong bases. Strong acids.
Incompatible materials : Sources of ignition. Direct sunlight.

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

No additional information available

8.2. Exposure controls

рH

Flash point

Personal protective equipment : Avoid all unnecessary exposure.

Hand protection : Wear protective gloves.

Eye protection : Chemical goggles or safety glasses.
Skin and body protection : Wear suitable protective clothing.

Respiratory protection : Wear appropriate mask.

Other information : Do not eat, drink or smoke during use.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state : Liquid

Appearance : Amber-yellow liquid.
Color : Clear amber-yellow

Odor : Fatty odor

Odor threshold : No data available

Relative evaporation rate (butyl acetate=1) : No data available Melting point : No data available

Freezing point : No data available Boiling point : No data available

Auto-ignition temperature : No data available
Decomposition temperature : No data available
Flammability (solid, gas) : No data available

Vapor pressure : No data available
Relative vapor density at 20 °C : No data available
Relative density : No data available
Density : 9.96 Lbs/gallon

Solubility : Water: Solubility in water of component(s) of the mixture :

: 7.75 (≥ 8.5)

: > 93.33 °C

•: •:

Log Pow : No data available

09/05/2014 EN (English US) 3/7

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Log Kow : No data available
Viscosity, kinematic : No data available
Viscosity, dynamic : No data available
Explosive properties : No data available
Oxidizing properties : No data available
Explosive limits : No data available

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

No additional information available

10.2. Chemical stability

Not established.

10.3. Possibility of hazardous reactions

Not established.

10.4. Conditions to avoid

Direct sunlight. Extremely high or low temperatures.

10.5. Incompatible materials

Strong acids. Strong bases.

10.6. Hazardous decomposition products

fume. Carbon monoxide. Carbon dioxide.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity : Harmful if swallowed. Harmful if inhaled.

| Ad-Max 90™ | |
|---------------------|-------------------------------|
| ATE US (oral) | 500.0000000 mg/kg body weight |
| ATE US (gases) | 4500.00000000 ppmV/4h |
| ATE US (vapors) | 11.00000000 mg/l/4h |
| ATE US (dust, mist) | 1.50000000 mg/l/4h |

| 1,2,3-Propanetriol (56-81-5) | |
|------------------------------|---------------------------------|
| LD50 oral rat | 12600 mg/kg (Rat) |
| LD50 dermal rabbit | > 10000 mg/kg (Rabbit) |
| ATE US (oral) | 12600,0000000 mg/kg body weight |

Alkyl phenol ethoxylate

LD50 oral rat > 1310 mg/kg

Skin corrosion/irritation : Causes skin irritation.

pH: 7.75 (≥ 8.5)

Serious eye damage/irritation : Causes eye irritation.

pH: 7.75 (≥ 8.5)

Respiratory or skin sensitization : Not classified
Germ cell mutagenicity : Not classified
Carcinogenicity : Not classified
Reproductive toxicity : Not classified
Specific target organ toxicity (single exposure) : Not classified

Specific target organ toxicity (repeated

exposure)

: Not classified

Aspiration hazard : Not classified

09/05/2014 EN (English US) 4/7

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Potential Adverse human health effects and

symptoms

: Based on available data, the classification criteria are not met. Harmful if swallowed.

Symptoms/injuries after skin contact : Causes skin irritation. Symptoms/injuries after eye contact : Causes eye irritation.

Symptoms/injuries after ingestion : Swallowing a small quantity of this material will result in serious health hazard.

SECTION 12: Ecological information

12.1. Toxicity

| 1,2,3-Propanetriol (56-81-5) | |
|---|--|
| LC50 fish 1 | 54000 mg/l 96 h; Salmo gairdneri (Oncorhynchus mykiss) |
| LC50 other aquatic organisms 1 | > 1000 mg/l (96 h) |
| EC50 Daphnia 1 | > 10000 mg/l (24 h; Daphnia magna; Locomotor effect) |
| LC50 fish 2 | > 1000 mg/l (96 h; Pisces) |
| TLM fish 1 | > 1000 ppm (96 h; Pisces) |
| TLM other aquatic organisms 1 | > 1000 ppm (96 h) |
| Threshold limit other aquatic organisms 1 | > 1000 mg/l (96 h) |
| Threshold limit algae 1 | > 10000 mg/l (168 h; Scenedesmus quadricauda; Toxicity test) |

| Alkyl phenol ethoxylate | |
|--------------------------------|--|
| LC50 fish 1 | 5 mg/l (96 h; Gasterosteus aculeatus; Intermittent flow) |
| EC50 other aquatic organisms 1 | 500 mg/l (Selenastrum capricornutum; Chronic) |
| LC50 fish 2 | 7 mg/l (96 h; Leuciscus idus) |
| Threshold limit algae 1 | 500 mg/l (Selenastrum capricornutum; Cell numbers) |

12.2. Persistence and degradability

| Ad-Max 90™ | | |
|----------------------------------|--|--|
| Persistence and degradability | Not established. | |
| 1,2,3-Propanetriol (56-81-5) | | |
| Persistence and degradability | Readily biodegradable in water. Not established. | |
| Riochemical ovvigen demand (ROD) | 0.87 a O ₋ /a substance | |

| Persistence and degradability | Readily biodegradable in water. Not established. |
|---------------------------------|--|
| Biochemical oxygen demand (BOD) | 0.87 g O ₂ /g substance |
| Chemical oxygen demand (COD) | 1.16 g O ₂ /g substance |
| ThOD | 1.217 g O ₂ /g substance |
| BOD (% of ThOD) | 0.71 % ThOD |

Persistence and degradability Not readily biodegradable in water. Not established.

Dimethylbenzenesulfonic acid

Persistence and degradability Not established.

12.3. Bioaccumulative potential

| Ad-Max 90™ | |
|---------------------------|------------------|
| Bioaccumulative potential | Not established. |

| 1,2,3-Propanetriol (56-81-5) | | |
|------------------------------|---------------------------|---|
| | Log Pow | -1.76 - 2.6 |
| | Bioaccumulative potential | Bioaccumulation: not applicable. Not established. |

| · | |
|---------------------------|------------------|
| Alkyl phenol ethoxylate | |
| Log Pow | > 4 |
| Bioaccumulative potential | Not established. |

| Dimethylbenzenesulfonic acid | |
|------------------------------|------------------|
| Bioaccumulative potential | Not established. |

12.4. Mobility in soil

| 1,2,3-Propanetriol (56-81-5) | |
|------------------------------|-----------|
| Surface tension | 0.063 N/m |

09/05/2014 EN (English US) 5/7

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

12.5. Other adverse effects

Effect on ozone layer : No additional information available

Effect on the global warming : No known ecological damage caused by this product.

Other information : Avoid release to the environment.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste disposal recommendations : Dispose in a safe manner in accordance with local/national regulations. Dispose of

contents/container to ...

Ecology - waste materials : Avoid release to the environment.

SECTION 14: Transport information

In accordance with DOT Not regulated for transport

Additional information

Other information : No supplementary information available.

ADR

Transport document description

Transport by sea

No additional information available

Air transport

No additional information available

SECTION 15: Regulatory information

15.1. US Federal regulations

All components of this product are listed on the Toxic Substances Control Act (TSCA) inventory except for:

Sodium Xylenesulfonate CAS No 25321-41-9 C<=90.00%

This product or mixture does not contain a toxic chemical or chemicals in excess of the applicable de minimis concentration as specified in 40 CFR §372.38(a) subject to the reporting requirements of section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372.

Dimethylbenzenesulfonic acid

Not listed on the United States TSCA (Toxic Substances Control Act) inventory

15.2. International regulations

CANADA

No additional information available

EU-Regulations

No additional information available

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Classification according to Directive 67/548/EEC or 1999/45/EC

Not classified

15.2.2. National regulations

No additional information available

15.3. US State regulations

California Proposition 65 - This product does not contain any substances known to the state of California to cause cancer and/or reproductive harm

1,2,3-Propanetriol (56-81-5)

U.S. - New Jersey - Right to Know Hazardous Substance List

09/05/2014 EN (English US) 6/7

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

SECTION 16: Other information

:

Other information : None.

Full text of H-phrases: see section 16:

| Acute Tox. 4 (Inhalation) | Acute toxicity (inhalation) Category 4 |
|---------------------------|---|
| Acute Tox. 4 (Oral) | Acute toxicity (oral) Category 4 |
| Eye Irrit. 2B | Serious eye damage/eye irritation Category 2B |
| Skin Irrit. 2 | Skin corrosion/irritation Category 2 |
| H302 | Harmful if swallowed |
| H315 | Causes skin irritation |
| H320 | Causes eye irritation |
| H332 | Harmful if inhaled |

SDS US (GHS HazCom 2012)

Disclaimer: This information relates to the specific material designated and may not be valid for such material used in combination with any other materials or in any process. Such information is to the best of our knowledge and belief, accurate and reliable as of the date compiled. However, no representation, warranty or guarantee is made as to its accuracy, reliability or completeness. NO WARRANTY OF MERCHANTABILITY, FITNESS FOR ANY PARTICULAR PURPOSE, OR ANY OTHER WARRANTY, EXPRESS OR IMPLIED, IS MADE CONCERNING THE INFORMATION HEREIN PROVIDED. It is the user's responsibility to satisfy himself as to the suitability and completeness of such information for his own particular use. We do not accept liability for any loss or damage that may occur from the use of this information nor do we offer warranty against patent infringement.

09/05/2014 EN (English US) 7/7