SECTION 1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1 Product identifier
Product name : ADIGOR
Design code : A12127R

1.2 Relevant identified uses of the substance or mixture and uses advised against
Use : Adjuvant

1.3 Details of the supplier of the safety data sheet
Company : Syngenta UK Limited
CPC4, Capital Park
Fulbourn, Cambridge
CB21 6AE
Telephone : (01223) 883400
Telefax : (01223) 882195
Website : www.syngenta.co.uk

1.4 Emergency telephone number : +44 (0) 1484 538444

SECTION 2. HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture
Classification according to Regulation (EU) 1272/2008

- Aspiration hazard Category 1 H304
- Skin Sensitisation Category 1B H317
- Chronic aquatic toxicity Category 3 H412

For the full text of the H-Statements mentioned in this Section, see Section 16.
2.2 Label elements

Labelling: Regulation (EC) No. 1272/2008

<table>
<thead>
<tr>
<th>Hazard pictograms</th>
<th>Signal Word</th>
<th>Danger</th>
<th>Hazard Statements</th>
<th>Precautions Statements</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>:H304 May be fatal if swallowed and enters airways.</td>
<td>:P102 Keep out of reach of children.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>:H412 Harmful to aquatic life with long lasting effects</td>
<td>:P280 Wear protective gloves/protective clothing.</td>
</tr>
</tbody>
</table>

Supplemental Information

:EUH066 Repeated exposure may cause skin dryness or cracking.

:EUH401 To avoid risks to human health and the environment comply with the instructions for use.

Hazardous components which must be listed on the label:

2.3 Other hazards

no data available

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

3.2 Mixtures

Hazardous components

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS-No.</th>
<th>EC-No.</th>
<th>Classification (REGULATION (EC) No 1272/2008)</th>
<th>Concentration</th>
</tr>
</thead>
<tbody>
<tr>
<td>(E)-18-ethoxyoctadec-3-ene</td>
<td>68920-66-1</td>
<td></td>
<td>Skin Irrit.2; H315</td>
<td>25 - 35 % W/W</td>
</tr>
<tr>
<td>solvent naphtha (petroleum), highly arom.</td>
<td>64742-94-5</td>
<td>265-198-5</td>
<td>922-153-0</td>
<td>01-2119451097-39-0</td>
</tr>
</tbody>
</table>
SECTION 4. FIRST AID MEASURES

4.1 Description of first aid measures

General Advice: Have the product container, label or Material Safety Data Sheet with you when calling the Syngenta emergency number, a poison control centre or physician, or going for treatment.

Inhalation: Move the victim to fresh air. If breathing is irregular or stopped, administer artificial respiration. Keep patient warm and at rest. Call a physician or Poison Control Centre immediately.

Skin Contact: Take off all contaminated clothing immediately. Wash off immediately with plenty of water. If skin irritation persists, call a physician. Wash contaminated clothing before re-use.

Eye Contact: Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Remove contact lenses. Immediate medical attention is required.

Ingestion: If swallowed, seek medical advice immediately and show this container or label. Do NOT induce vomiting. Contains petroleum distillates and/or aromatic solvents.

4.2 Most important symptoms and effects, both acute and delayed

Symptoms: Aspiration may cause pulmonary oedema and pneumonitis.

4.3 Indication of any immediate medical attention and special treatment needed

Medical advice: There is no specific antidote available. Treat symptomatically. Do not induce vomiting: contains petroleum distillates and/or aromatic solvents.

SECTION 5. FIREFIGHTING MEASURES

5.1 Extinguishing media

Extinguishing media - small fires
Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

Extinguishing media - large fires
Use alcohol-resistant foam or water spray. Do not use a solid water stream as it may scatter and spread fire.

5.2 Special hazards arising from the substance or mixture

As the product contains combustible organic components, fire will produce dense black smoke containing hazardous products of combustion (see section 10). Exposure to decomposition products may be a hazard to health.

5.3 Advice for fire-fighters:

Wear full protective clothing and self-contained breathing apparatus. Do not allow run-off from fire fighting to enter drains or water courses. Cool closed containers exposed to fire with water spray.
SECTION 6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures
Refer to protective measures listed in sections 7 and 8. Avoid dust formation.

6.2 Environmental precautions:
Prevent further leakage or spillage if safe to do so. Do not flush into surface water or sanitary sewer system.

6.3 Methods and materials for containment and cleaning up
Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see section 13). If the product contaminates rivers and lakes or drains inform respective authorities.

6.4 Reference to other sections
Refer to protective measures listed in sections 7 and 8.
Refer to disposal considerations listed in section 13.

SECTION 7. HANDLING AND STORAGE

7.1 Precautions for safe handling
No special protective measures against fire required. Avoid contact with skin and eyes. When using do not eat, drink or smoke. For personal protection see section 8.

7.2 Conditions for safe storage, including any incompatibilities
No special storage conditions required..Keep containers tightly closed in a dry, cool and well-ventilated place. Keep out of the reach of children. Keep away from food, drink and animal feedingstuffs.

7.3 Specific end use(s)
Registered Crop Protection products: For proper and safe use of this product, please refer to the approval conditions laid down on the product label.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

<table>
<thead>
<tr>
<th>Components</th>
<th>Exposure limit(s)</th>
<th>Type of exposure limit</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>solvent naphtha (petroleum), highly arom.</td>
<td>20 ppm, 100 mg/m3</td>
<td>8 h TWA</td>
<td>SUPPLIER</td>
</tr>
</tbody>
</table>

The following recommendations for exposure controls/personal protection are intended for the manufacture, formulation and packaging of the product.

8.2 Exposure controls

Engineering Measures : Containment and/or segregation is the most reliable technical protection measure if exposure cannot be eliminated. The extent of these protection measures depends on the actual risks in use. If
Adigor

Version 4 - This version replaces all previous versions.
Revision Date 25.11.2013


When airborne dust is generated, use local exhaust ventilation controls. Assess exposure and use any additional measures to keep airborne levels below any relevant exposure limit. Where necessary, seek additional occupational hygiene advice.

**Protective measures:** The use of technical measures should always have priority over the use of personal protective equipment. When selecting personal protective equipment, seek appropriate professional advice. Personal protective equipment should be certified to appropriate standards.

**Respiratory protection:** A combination gas, vapor and particulate respirator may be necessary until effective technical measures are installed. Protection provided by air-purifying respirators is limited. Use a self-contained breathing apparatus in cases of emergency spills, when exposure levels are unknown, or under any circumstances where air-purifying respirators may not provide adequate protection.

**Hand protection:** Chemical resistant gloves should be used. Gloves should be certified to an appropriate standard. Gloves should have a minimum breakthrough time that is appropriate to the duration of exposure. The breakthrough time of gloves varies according to the thickness, material and manufacturer. Gloves should be discarded and replaced if there is any indication of degradation or chemical breakthrough. Suitable material Nitrile rubber

**Eye Protection:** Eye protection is not usually required. Follow any site specific eye protection policies.

**Skin and body protection:** Assess the exposure and select chemical resistant clothing based on the potential for contact and the permeation / penetration characteristics of the clothing material. Wash with soap and water after removing protective clothing. Decontaminate clothing before re-use, or use disposable equipment (suits, aprons, sleeves, boots, etc.) Wear as appropriate: impervious protective suit

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### SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

#### 9.1 Information on basic physical and chemical properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical State</td>
<td>liquid</td>
</tr>
<tr>
<td>Form</td>
<td>liquid</td>
</tr>
<tr>
<td>Colour</td>
<td>light yellow to yellow</td>
</tr>
<tr>
<td>Odour</td>
<td>aromatic, like solvent</td>
</tr>
<tr>
<td>Odour Threshold</td>
<td>No data available</td>
</tr>
<tr>
<td>pH</td>
<td>4 - 8 at 1 % w/v</td>
</tr>
<tr>
<td>Melting point/range</td>
<td>No data available</td>
</tr>
<tr>
<td>Boiling point/boiling range</td>
<td>No data available</td>
</tr>
<tr>
<td>Flash point</td>
<td>123 °C</td>
</tr>
<tr>
<td>Evaporation rate</td>
<td>No data available</td>
</tr>
<tr>
<td>Flammability (solid, gas)</td>
<td>Not highly flammable</td>
</tr>
<tr>
<td>Lower explosion limit</td>
<td>No data available</td>
</tr>
<tr>
<td>Upper explosion limit</td>
<td>No data available</td>
</tr>
<tr>
<td>Vapour pressure</td>
<td>No data available</td>
</tr>
<tr>
<td>Relative vapour density</td>
<td>No data available</td>
</tr>
<tr>
<td>Density</td>
<td>0.926 g/ml at 20 °C</td>
</tr>
<tr>
<td>Solubility in other solvents</td>
<td>No data available</td>
</tr>
<tr>
<td>Partition Coefficient: n-octanol/water</td>
<td>No data available</td>
</tr>
<tr>
<td>Autoignition temperature</td>
<td>290 °C</td>
</tr>
</tbody>
</table>
**ADIGOR**

Version 4 - This version replaces all previous versions.

Revision Date 25.11.2013

<table>
<thead>
<tr>
<th>Thermal decomposition</th>
<th>No data available</th>
</tr>
</thead>
<tbody>
<tr>
<td>Viscosity, dynamic</td>
<td>8.05 mPa.s at 40 °C</td>
</tr>
<tr>
<td></td>
<td>15.1 mPa.s at 20 °C</td>
</tr>
<tr>
<td>Viscosity, kinematic</td>
<td>No data available</td>
</tr>
<tr>
<td>Explosive properties</td>
<td>Not explosive</td>
</tr>
<tr>
<td>Oxidizing properties</td>
<td>Not oxidising</td>
</tr>
</tbody>
</table>

9.2 Other information

<table>
<thead>
<tr>
<th>Miscibility</th>
<th>Miscible</th>
</tr>
</thead>
<tbody>
<tr>
<td>Surface tension</td>
<td>32.4 mN/m at 25 °C</td>
</tr>
</tbody>
</table>

**SECTION 10. STABILITY AND REACTIVITY**

10.1 Reactivity : No information available

10.2 Chemical Stability : No information available

10.3 Possibility of hazardous reactions : None known. Hazardous polymerisation does not occur.

10.4 Conditions to avoid : No information available

10.5 Incompatible materials : No information available

10.6 Hazardous decomposition products : Combustion or thermal decomposition will evolve toxic and irritant vapours.

**SECTION 11. TOXICOLOGICAL INFORMATION**

11.1 Information on toxicological effects

Acute oral toxicity : LD50 female rat, > 5,000 mg/kg

Acute inhalational toxicity : LC50 rat, 4,778 mg/l OECD Test Guideline 403

Acute dermal toxicity : LD50 male and female rat, > 5,000 mg/kg

Skin corrosion/irritation : Rabbit, mildly irritating

Serious eye damage/eye irritation : Rabbit, mildly irritating

Respiratory or skin sensitisation : Buehler Test guinea pig, a skin sensitiser in animal tests.

Germ cell mutagenicity : Not mutagenic in Ames Test.

Carcinogenicity : Animal testing did not show any carcinogenic effects.

Reproductive toxicity : No toxicity to reproduction

Aspiration toxicity : GHS-Classification Category 1
SECTION 12. ECOLOGICAL INFORMATION

12.1 Toxicity

Toxicity to fish : LC50 Oncorhynchus mykiss (rainbow trout), 9.6 mg/l, 96 h
Toxicity to aquatic invertebrates : EC50 Daphnia magna (Water flea), 7.1 mg/l, 48 h
Toxicity to aquatic plants : ErC50 Pseudokirchneriella subcapitata (green algae), 1.22 mg/l, 72 h
EbC50 Pseudokirchneriella subcapitata (green algae), 0.51 mg/l, 72 h

12.2 Persistence and degradability

Stability in soil : no data available

12.3 Bioaccumulative potential

no data available

12.4 Mobility in soil

no data available

12.5 Results of PBT and vPvB assessment

no data available

12.6 Other adverse effects

Other information : Classification of the product is based on the summation of the concentrations of classified components.

SECTION 13. DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

Product : Do not contaminate ponds, waterways or ditches with chemical or used container. Do not dispose of waste into sewer. Where possible recycling is preferred to disposal or incineration. If recycling is not practicable, dispose of in compliance with local regulations.

Contaminated packaging : Empty remaining contents. Triple rinse containers. Empty containers should be taken for local recycling or waste disposal. Do not re-use empty containers.

SECTION 14. TRANSPORT INFORMATION

Land transport (ADR/RID)

| 14.1 | UN Number         | : | UN 3082 |
| 14.2 | UN proper shipping name | : | ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (SOLVENT NAPHTHA) |
| 14.3 | Transport hazard class(es) | : | 9 |
| 14.4 | Packing Group     | : | III |
| 14.5 | Environmental hazards | : | Environmentally hazardous |

Sea transport (IMDG)

| 14.1 | UN Number         | : | UN 3082 |
| 14.2 | UN proper shipping name | : | ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (SOLVENT NAPHTHA) |
| 14.3 | Transport hazard class(es) | : | 9 |
| 14.4 | Packing Group     | : | III |
| 14.5 | Environmental hazards | : | Marine Pollutant |
Air transport (IATA-DGR)

<table>
<thead>
<tr>
<th>14.1</th>
<th>UN Number</th>
<th>UN 3082</th>
</tr>
</thead>
<tbody>
<tr>
<td>14.2</td>
<td>UN proper shipping name</td>
<td>ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (SOLVENT NAPTHHA)</td>
</tr>
<tr>
<td>14.3</td>
<td>Transport hazard class(es)</td>
<td>9</td>
</tr>
<tr>
<td>14.4</td>
<td>Packing Group</td>
<td>III</td>
</tr>
<tr>
<td>14.6</td>
<td>Special precautions for user</td>
<td>none</td>
</tr>
</tbody>
</table>

14.6 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code not applicable

SECTION 15. REGULATORY INFORMATION

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

GHS-Labelling

Hazard pictograms

Signal Word: Danger

Hazard Statements:
- H304 May be fatal if swallowed and enters airways.
- H317 May cause an allergic skin reaction.
- H412 Harmful to aquatic life with long lasting effects

Precautions Statements:
- P102 Keep out of reach of children
- P261 Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray.
- P280 Wear protective gloves/protective clothing.
- P301/310 IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.
- P331 Do NOT induce vomiting.
- P302/P352 IF ON SKIN: Wash with plenty of soap and water
- P333/P313 IF skin irritation or rash occurs: Get medical advice/attention.

Supplemental Information:
- EUH066 Repeated exposure may cause skin dryness or cracking.
- EUH401 To avoid risks to human health and the environment comply with the instructions for use.

Hazardous components which must be listed on the label:
- solvent naphtha (petroleum), highly arom.
15.2 Chemical Safety Assessment
A Chemical Safety Assessment is not required for this substance.

SECTION 16. OTHER INFORMATION

Approval number, ADJ 0522; PCS No. 92268
Use plant protection products safely. Always read the label and product information before use.
Based upon SDS release dated 25/11/2013, version 4 with local amendment.

Full text of H-Statements referred to under sections 2 and 3.

H304 May be fatal if swallowed and enters airways
H315 Causes skin irritation
H317 May cause an allergic skin reaction.
H411 Toxic to aquatic life with long lasting effects
H412 Harmful to aquatic life with long lasting effects.

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

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