Material Safety Data Sheet

Issue Date : January 17, 2012
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Version No. : 3

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

R&D Chemical. Experimental Use Only by Qualified Investigators.

1.1. Product identifier

Name of product: **A253**
Common name: Not available.
EINECS or ELINCS number: Not assigned.
Registration number: Not assigned.

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

Function: Experimental chemical for research and development.

1.3. Details of the supplier of the safety data sheet

Nissan Chemical Industries, Ltd.
Kowa Hitotsubashi Building, 7-1, 3-chome, Kanda-Nishiki-cho, Chiyoda-ku, Tokyo 101-0054 Japan
Contact person: Mr. Osamu YAMAMOTO
Phone: +81-(0)-3-3296-8151, Fax: +81-(0)-3-3296-8016

1.4. Emergency telephone number

Nissan Chemical Industries, Ltd.: +81-(0)-3-3296-8151 (available only during office hours)

2. HAZARD IDENTIFICATION

2.1. Classification of the substance or mixture

Classification in accordance with Regulation (EC) No 1272/2008

Hazard Classification: Acute Aquatic Toxicity Category 1
Chronic Aquatic Toxicity Category 1
Signal Word: Warning
Hazard Statement: H400 Very toxic to aquatic life.
H410 Very toxic to aquatic life with long lasting effects.
Precautionary Statement: P273 Avoid release to the environment.
P391 Collect spillage.
P501 Dispose of contents/container in accordance with local regulations.
Hazard pictogram:

Classification in accordance with Council Directive 67/548/EEC

Hazard symbols: N Dangerous for the environment
Risk phrases: R50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
Safety phrases : S57 Use appropriate container to avoid environmental contamination.
S60 This material and its container must be disposed of as hazardous waste.
S61 Avoid release into the environment.
Refer to special instructions/safety data sheet.

3. COMPOSITION/INFORMATION OF INGREDIENTS

Substance or mixture: Substance

Chemical Composition:
NC-515 Minimum 95 % w/w (950 g/kg)

4. FIRST AID MEASURES

4.1. Description of first aid measures

Eye contact : Immediately rinse with running water for at least 15 minutes. Seek medical advice.

Skin contact : Remove all contaminated clothing, shoes and socks from the affected area. Immediately rinse with running water. Wash skin thoroughly with soap and water. If irritation persists, seek medical advice.

Inhalation : If respiratory discomfort occurs, move the person to fresh air. If not breathing, give mouth-to-mouth resuscitation (or an artificial respiration). Keep warm with blanket and keep at rest. Seek emergency medical advice

Ingestion : Wash out mouth with water. Do not given anything by mouth if person is unconscious. Seek medical advice immediately.

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

No symptoms have been identified in humans to date.

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

Treat based on judgment by physician in response to symptoms of patient. No specific antidotes are known.

5. FIREFIGHTING MEASURES

5.1. Extinguishing media

Suitable extinguishing media : Water, foam, dry chemicals or carbon dioxide (CO_2).

Extinguishing media which shall not be used for safety reasons : High volume water jet.

5.2. Special hazards arising from the substance or mixture

Carbon monoxide, nitrogen oxides and sulfur oxides are potential thermal decomposition products.

5.3. Advice for firefighters

In the event of fire and/or explosion do not breathe fumes. Use self-contained breathing apparatus and protective clothing

Move the product away from fire if there is no risk. Use a water spray or fog nozzle to keep containers or surrounding area cool. Fight fire from upwind position. Contain run-off to prevent entry into water or drainage systems.

6. ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

Wear suitable protective clothing, shoes, gloves and goggles. Avoid contact with spilled product or contaminated surfaces. When dealing with a spillage do not eat, drink or smoke.

For fire-fighters, use self-contained breathing apparatus and protective clothing.

6. ACCIDENTAL RELEASE MEASURES (continued)

6.2. Environmental precautions

Prevent spillage from entering the drainage systems or watercourses. Advise water authority if spillage has entered water course or drainage systems.

6.3. Methods and material for containment and cleaning up

Carefully sweep up and collect the spilled material using an inert absorbent material (sand, vermiculite, or sawdust) and place in a closed container (drum) for disposal. Remove (large quantities) with vacuum truck. Do not raise dust. Wash affected area with water containing detergent.

6.4. Reference to other sections

See section 8 for personnel protective equipment.
See section 13 for waste disposal.

7. HANDLING AND STORAGE

7.1. Precautions for safe handling

No specific precautions required when handling unopened packs/containers. Protect containers against physical damage. Wear suitable protective clothing, shoes, gloves and goggle during handling. Do not breathe dust. Avoid contact with skin or eyes. Do not eat, drink, or smoke during the work. Prevent spillage from entering the drainage systems or watercourses.

7.2. Conditions for safe storage, including any incompatibilities

Keep tightly closed in original labeled container. Store in a cool and dry place and protect from direct sunlight. Keep away from the reach of children. Keep away from foods, drinks and animal feeding stuffs.

7.3. Specific end use(s)

Use this product only for plant protection under outdoor conditions.

8. EXPOSURE CONTROL/PERSONAL PROTECTION

8.1. Control parameters

Exposure limit values (DNEL, PNEC) : Not established.

8.2. Exposure controls

Exposure controls

Occupational exposure controls

Respiratory protection	:	Dust respirator/mask.
Hand protection	:	Chemical resistant gloves, Rubber gloves.
Eye protection	:	Safety glasses or goggles.
Skin protection	:	Impervious clothing such as gloves, apron or PVC boots.
Environmental exposure controls	:	Prevent spillage from entering the drainage systems or watercourses.

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

Appearance	:	White powder.
Odour	:	Not available.
pH	:	Not available.
Melting point/melting range	:	171-173°C
Boiling point/boiling range	:	Not applicable since the product is solid at ambient temperature.
Flash point	:	Not applicable since the product is solid at ambient temperature.
Evaporation rate	:	Not applicable since the product is solid at ambient temperature.

9. PHYSICAL AND CHEMICAL PROPERTIES (continued)

Flammability	:	Not available.
Vapor pressure	:	Not available.
Vapor density	:	Not applicable since the product is solid at ambient temperature.
Relative density	:	Not available.
Solubility	:	Not available.
Water solubility	:	0.07 mg/L.
Partition coefficient (n-octanol/water)	:	Log Pow = 5.0 (HPLC method)
Auto-ignition temperature	:	Not available.
Decomposition temperature	:	Not available.
Viscosity	:	Not applicable since the product is solid at ambient temperature.
Explosive properties	:	Not available.
Oxidising properties	:	Not available.

9.2. Other information

No other information is available.

10. STABILITY AND REACTIVITY

10.1. Reactivity

May react with strong bases, acids or strong oxidizing agents, such as chlorates, nitrates, peroxides.

10.2. Chemical stability

Stable under normal ambient storage conditions.

10.3. Possibility of hazardous reactions

Hazardous reactions will not occur.

10.4. Conditions to avoid

Avoid high temperatures. Protect from (sun)light , open flame , sources of heat and humidity.

10.5. Incompatible materials

May react with strong bases, acids or strong oxidizing agents, such as chlorates, nitrates, peroxides.

10.6. Hazardous decomposition products

None hazardous decomposition products under normal conditions of storage and use. Thermal decomposition products will include carbon monoxide, nitrogen oxides and sulfur oxides.

11. TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects

Acute oral toxicity	:	LD_{50}(mice)>2,000 mg/kg.
Acute dermal toxicity	:	Not available.
Acute inhalation toxicity	:	Not available.
Eye irritation	:	No.
Skin irritation	:	Not available.
Sensitization	:	Not available.
Short-term dermal toxicity	:	Not available.
Chronic	:	Not available.
Carcinogenicity	:	Not available.
Reproductive toxicity	:	Not available.
Developmental toxicity	:	Not available.
Mutagenicity	:	Negative (Ames)

12. ECOLOGICAL INFORMATION

12.1. Toxicity

Toxicity to fish	:	LC_{50} (medaka): > 1 mg/l.
Toxicity to Daphnia	:	EC_{50} : > 0.1 μg/l.
Toxicity to algae	:	EC_{50} : > 1 mg/l.
Toxicity to bees	:	Not available.
Toxicity to earthworm	:	Not available.
Toxicity to bird	:	Not available.
Soil micro-organism	:	Not available.
Sewage treatment	:	Not available.

12.2. Persistence and degradability

Not available.

Aqueous photolysis (25°C) : Not available.

12.3. Bioaccumulative potential

Partition coefficient (n-octanol/water)	:	Not available.
Bioconcentration	:	Not available.

12.4. Mobility in soil

Adsorption/desorption : Not available.

12.5. Results of PBT and vPvB assessment

Not available.

12.6. Other adverse effects

Not available.

13. DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods

Do not contaminate water, foodstuffs, feed or seed by disposal.

PRODUCT DISPOSAL

Wastes resulting from the use of this product that cannot be used or chemically reprocessed should be disposed of in a landfill approved for pesticide disposal or burned in incinerator in accordance with all applicable regulations.

CONTAINER DISPOSAL

Completely empty container by shaking and tapping sides and bottom to loosen clinging particles. Do not reuse container. Triple rinse container, then puncture and dispose of it by incineration in accordance with all applicable regulations.

14. TRANSPORT INFORMATION

The product is not subject to IMDG code and IATA regulations since the product is not dangerous product.

14.1. UN number

3077

14.2. UN proper shipping name

Environmentally hazardous substance, solid, n.o.s. (isoxazoline derivative)

14.3. Transport hazard class(es)

Class 9

14. TRANSPORT INFORMATION (continued)

14.4. Packing group
Packing Group III

14.5. Environmental hazards
Marine Pollutant Label : Marine Pollutant

14.6. Special precautions for user
No special precautions available.

14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code
No bulk transportation

14.8. Supplemental information

IMDG

UN No.	:	3077
Class	:	9
Packaging Group	:	III
Ems	:	F-A, S-F
Hazard Label	:	Miscellaneous (S)
Marine Pollutant Label	:	Marine Pollutant
Proper Shipping Name	:	Environmentally hazardous substance, solid, n.o.s. (isoxazoline derivative)

ICAO/IATA

UN No.	:	3077
Class	:	9
Packaging Group	:	III
Proper Shipping Name	:	Environmentally hazardous substance, solid, n.o.s. (isoxazoline derivative)

ADR/RID

UN No.	:	3077
Class	:	9
Packaging Group	:	III
Proper Shipping Name	:	Environmentally hazardous substance, solid, n.o.s. (isoxazoline derivative)

ADN/ADNR

UN No.	:	3077
Class	:	9
Packaging Group	:	III
Proper Shipping Name	:	Environmentally hazardous substance, solid, n.o.s. (isoxazoline derivative)

15. REGULATORY INFORMATION

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture
The product for scientific research and development is regulated under the Regulation (EC) No 1272/2008 when it is placed on the market and used under controlled conditions on accordance with Community workplace and environmental legislation.

15.2. Chemical safety assessment
The chemical safety assessment has not been carried out for this product yet.

16. OTHER INFORMATION

Text of relevant hazard statements, precautionary statements, risk phrases and safety phrases mentioned in section 2:

Hazard Statement:

H400 Very toxic to aquatic life.
H410 Very toxic to aquatic life with long lasting effects.

Precautionary Statement:

P273 Avoid release to the environment.
P391 Collect spillage.
P501 Dispose of contents/container in accordance with local regulations.

Risk phrases:

R50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Safety phrases:

S57 Use appropriate container to avoid environmental contamination.
S60 This material and its container must be disposed of as hazardous waste.
S61 Avoid release into the environment. Refer to special instructions/safety data sheet.

This Material Safety Data Sheet is prepared in accordance with **Commission Regulation (EU) No 453/2010 amending Regulation (EC) No 1907/2006 and "Globally Harmonized System of Classification and Labeling of Chemicals (GHS), 3rd revised edition"**.
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