Date of issue: 01/06/2017 Date of revision: 17/05/2021

Safety Data Sheet

1. Identification of the substance/mixture and of the company/undertaking

Product identifier:

Product name: Ammonium chromate

SDS No.: 0377E-2

Details of the supplier of the safety data sheet

Manufacturer/Supplier: KISHIDA CHEMICAL CO., LTD. Address: 3-1, Honmachibashi, Chuo-ku,Osaka ,JAPAN Division: Safety Management Dept. of Chemicals

Telephone number: +81-6-6946-8061

FAX: +81-6-6946-1607

e-mail address: kagakuhinanzenkanri@kishida.co.jp

2. Hazards identification

GHS classification and label elements of the product

Classification of the substance or mixture

HEALTH HAZARDS

Respiratory sensitization: Category 1

Skin sensitization: Category 1

Germ cell mutagenicity: Category 1B

Carcinogenicity: Category 1A
Reproductive toxicity: Category 1B

Specific target organ toxicity - single exposure: Category 1(central nervous system,

respiratory organs, cardiovascular system, haemal system, liver, kidney)

Specific target organ toxicity - repeated exposure: Category 1(respiratory organs)

ENVIRONMENT HAZARDS

Hazardous to the aquatic environment (Acute): Category 1
Hazardous to the aquatic environment (Long-term): Category 1

Label elements



Signal word: Danger HAZARD STATEMENT

May cause allergy or asthma symptoms or breathing difficulties if inhaled

May cause an allergic skin reaction

May cause genetic defects

May cause cancer

May damage fertility or the unborn child

Causes damage to organs after single exposure(central nervous system, respiratory organs, cardiovascular system, haemal system, liver, kidney)

Causes damage to organs through prolonged or repeated exposure(respiratory organs)

Very toxic to aquatic life

Very toxic to aquatic life with long lasting effects

PRECAUTIONARY STATEMENT

Prevention

Avoid release to the environment.

Do not breathe dust/fume/gas/mist/vapors/spray.

In case of inadequate ventilation wear respiratory protection. (as specified by the manufacturer/supplier or the competent authority.)

Wash contaminated parts thoroughly after handling.

Wear protective gloves.

Contaminated work clothing should not be allowed out of the workplace.

Do not eat, drink or smoke when using this product.

Response

Collect spillage.

Get medical advice/attention if you feel unwell.

IF exposed or concerned: Get medical advice/attention.

IF exposed or concerned: Call a POISON CENTER or doctor/physician.

If experiencing respiratory symptoms: Call a POISON CENTER or doctor/physician.

IF INHALED: Remove person to fresh air and keep comfortable for breathing.

IF ON SKIN: Wash with plenty of soap and water.

If skin irritation or rash occurs: Get medical advice/attention.

Take off contaminated clothing and wash it before reuse.

Disposal

Dispose of contents/container in accordance with local/national regulation.

3. Composition/information on ingredients

Mixture/Substance selection:

Substance

Ingredient name: Ammonium chromate

Content (%):95(min)

Chemical formula:(NH4)2CrO4

Chemicals No, Japan:1-1117

CAS No.:7788-98-9

MW:152.07

ECNO:232-138-4

Note: The figures shown above are not the specifications of the product.

4. First-aid measures

Descriptions of first-aid measures

General measures

Get medical attention/advice if you feel unwell.

IF INHALED

Remove person to fresh air and keep comfortable for breathing.

If experiencing respiratory symptoms: Call a POISON CENTER or doctor/physician.

Call a POISON CENTER or doctor/physician if you feel unwell.

IF ON SKIN (or hair)

Take off immediately all contaminated clothing. Rinse skin with water/shower.

Wash with plenty of soap and water.

If skin irritation or rash occurs: Get medical advice/attention.

IF IN EYES

Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

If eye irritation persists: Get medical advice/attention.

IF SWALLOWED

Rinse mouth.

Call a POISON CENTER or doctor/physician if you feel unwell.

5. Fire-fighting measures

Extinguishing media

Suitable extinguishing media

Use appropriate extinguishing media suitable for surrounding facilities.

Unsuitable extinguishing media

Unsuitable extinguishing media data is not available.

Specific hazards arising from the substance or mixture

Containers may explode when heated.

Fire may produce irritating, corrosive and/or toxic gases.

Advice for firefighters

Specific fire-fighting measures

Evacuate non-essential personnel to safe area.

Special protective equipment and precautions for fire-fighters

Wear fire/flame resistant/retardant clothing.

Wear protective gloves/protective clothing/eye protection/face protection.

Firefighters should wear self-contained breathing apparatus with full face peace operated positive pressure mode.

6. Accidental release measures

Personnel precautions, protective equipment and emergency procedures

Ventilate area until material pick up is complete.

Wear proper protective equipment.

Environmental precautions

Prevent spills from entering sewers, watercourses or low areas.

Avoid raising dust.

Methods and materials for containment and cleaning up

Sweep up, place in a bag and hold for waste disposal.

Preventive measures for secondary accident

Collect spillage.

7. Handling and storage

Precautions for safe handling

Preventive measures

(Exposure Control for handling personnel)

Do not breathe dust/fume/gas/mist/vapors/spray.

(Protective measures against fire and explosion)

Keep away from heat/sparks/open flames/hot surfaces. - No smoking.

(Exhaust/ventilator)

Exhaust/ventilator should be available.

(Safety treatments)

Avoid contact with skin.

Avoid contact with eyes.

Safety Measures

Wear protective gloves, protective clothing or face protection.

When using do not eat, drink or smoke.

Any incompatibilities

See "10.Stability and Reactivity"

Advice on general occupational hygiene

Wash contaminated parts thoroughly after handling.

Do not eat, drink or smoke when using this product.

Contaminated work clothing should not be allowed out of the workplace.

Take off contaminated clothing and wash it before reuse.

Storage

Conditions for safe storage

Keep container tightly closed.

Store in a cool, dry place. Do not store in direct sunlight.

Keep under lock and key.

Container and packaging materials for safe handling

Glass

Polyethylene

8. Exposure controls/personal protection

Control parameters

Adopted value

(Ammonium chromate)

ACGIH(2017) TWA: 0.0002mg-Cr(VI)/m3(I);

STEL: 0.0005mg-Cr(VI)/m3(I) (Lung & sinonasal cancer; resp tract irr; asthma)

Notation

(Ammonium chromate)

Skin: DSEN: RSEN

OSHA-PEL

(Ammonium chromate)

TWA: 1mg-Cr/m3 (isoluble salts)

Exposure controls

Appropriate engineering controls

Do not use in areas without adequate ventilation.

Eye wash station should be available.

Washing facilities should be available.

Individual protection measures

Respiratory protection

Wear respiratory protection.

Hand protection

Wear protective gloves.

Eye protection

Wear eye/face protection.

9. Physical and Chemical Properties

Information on basic physical and chemical properties

Physical state: Crystalline powder

Color: Yellow Odor: Odorless

Melting point/Freezing point: 180°C

Boiling point or initial boiling point data is not available.

Boiling range data is not available.

Flammability (gases, liquids and solids) data is not available.

Lower and upper explosion limit/flammability limit data is not available.

Flash point data is not available.

Auto-ignition temperature data is not available.

Decomposition temperature data is not available.

pH data is not available.

Kinematic viscosity data is not available.

Solubility:

Solubility in water: 40.5g/100g (30°C)

n-Octanol/water partition coefficient data is not available.

Vapor pressure data is not available.

Density and/or relative density: 1.92

Relative vapor density (Air=1) data is not available.

No Particle characteristics data is not available.

10. Stability and Reactivity

Reactivity

Not available.

Chemical stability

Stable under normal storage/handling conditions.

Possibility of hazardous reactions

Not available.

Conditions to avoid

Contact with fire source.

Incompatible materials

Not available.

Hazardous decomposition products

Chromic compounds

11. Toxicological Information

Information on toxicological effects

Acute toxicity data is not available.

Irritant properties

Skin corrosion/irritation data is not available.

Serious eye damage/irritation data is not available.

Sensitization

Respiratory sensitization

[Company proprietary data]

(Ammonium chromate)

Category 1

Skin sensitization

[Company proprietary data]

(Ammonium chromate)

Category 1

Germ cell mutagenicity

[Company proprietary data]

(Ammonium chromate)

Category 1B

Carcinogenicity

[Company proprietary data]

(Ammonium chromate)

Category 1A

(Ammonium chromate)

IARC-Gr.1 : Carcinogenic to humans

(Ammonium chromate)

ACGIH-A1(2017): Confirmed Human Carcinogen

Reproductive toxicity

[Company proprietary data]

(Ammonium chromate)

Category 1B

STOT

STOT-single exposure

[cat.1]

[Company proprietary data]

(Ammonium chromate)

central nervous system, respiratory organs, cardiovascular system, haemal system, liver, kidney

STOT-repeated exposure

[cat.1]

[Company proprietary data]

(Ammonium chromate)

respiratory organs

Aspiration hazard data is not available.

Information on other hazards

May cause lung disorders by massive inhalation of powdered substance.

-e.g. fibrosis of lung tissue, cough, sputum, breath shortness, dyspnea, decline of lung function, interstitial lung disease, pneumothorax

12. Ecological Information

Ecotoxicity

Aquatic toxicity

Very toxic to aquatic life

Very toxic to aquatic life with long lasting effects

Hazardous to the aquatic environment (Acute)

[Company proprietary data]

(Ammonium chromate)

Category 1

Hazardous to the aquatic environment (Long-term)

[Company proprietary data]

(Ammonium chromate)

Category 1

Persistence and degradability

Persistence and degradability data is not available.

Bioaccumulative potential

Bioaccumulative potential data is not available.

Mobility in soil

Mobility in soil data is not available.

Other adverse effects

Ozone depleting chemical data is not available.

13. Disposal considerations

Description of waste residues and information on their safe handling and methods of disposal, including the disposal of any contaminated packaging

Waste treatment methods

Avoid release to the environment (- if this is not the intended use).

Dispose of contents/container in accordance with local/national regulation.

14. Transport Information

UN No. or ID No.: 3077

UN Proper Shipping Name:

ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.

Class or division (Transport hazard class): 9

Packing group: III ERG GUIDE No.: 171

Special provisions No.: 274; 331; 335; 375

IMDG Code (International Maritime Dangerous Goods Regulations)

UN No.: 3077

Proper Shipping Name:

ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.

Class or division: 9
Packing group: III

Special provisions No.: 274; 335; 966; 967; 969

IATA Dangerous Goods Regulations

UN No.: 3077

Proper Shipping Name:

ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.

Class or division: 9

Hazard labels: Miscellaneous & Environmentally hazardous

Packing group: III

Special provisions No.: A97; A158; A179; A197; A215

Environmental hazards

MARPOL Annex III - Prevention of pollution by harmful substances

Marine pollutants (yes/no): yes

MARPOL Annex V - Prevention of pollution by garbage discharge

Germ cell mutagenicity: cat.1, 1A, 1B

Ammonium chromate

Carcinogenicity: cat.1, 1A, 1B

Ammonium chromate

Reproductive toxicity: cat.1, 1A, 1B

Ammonium chromate

Specific target organ toxicity - repeated exposure: cat.1

Ammonium chromate

Hazardous to the aquatic environment - acute hazard: cat.1

Ammonium chromate

Hazardous to the aquatic environment - long-term hazard: cat.1, 2

Ammonium chromate

15. Regulatory Information

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

Chemicals listed in TSCA Inventory

Ammonium chromate

Other regulatory information

Ensure this material in compliance with federal requirements and ensure conformity to local regulations.

16. Other information

GHS classification and labelling

Resp. Sens. 1: H334 May cause allergy or asthma symptoms or breathing difficulties if

inhaled

Skin Sens. 1: H317 May cause an allergic skin reaction

Muta. 1B: H340 May cause genetic defects

Carc. 1A: H350 May cause cancer

Repr. 1B: H360 May damage fertility or the unborn child

STOT SE 1: H370 Causes damage to organs after single exposure



STOT RE 1: H372 Causes damage to organs through prolonged or repeated exposure

Aquatic Acute 1: H400 Very toxic to aquatic life

Aquatic Chronic 1: H410 Very toxic to aquatic life with long lasting effects

Reference Book

Globally Harmonized System of classification and labelling of chemicals, UN Recommendations on the TRANSPORT OF DANGEROUS GOODS 21th edit., 2019 UN

IMDG Code, 2018 Edition (Incorporating Amendment 39-18)

IATA Dangerous Goods Regulations (62nd Edition) 2021

2020 EMERGENCY RESPONSE GUIDEBOOK (US DOT)

2020 TLVs and BEIs. (ACGIH)

Supplier's data/information

General Disclaimer

This data sheet was created based on the information we currently have and may be revised according to new information. In addition, the precautions apply only to normal handling, and in the case of special handling, please make adequate countermeasure to maintain your safety.

The data given here is based on current knowledge and experience. The purpose of this Safety Data Sheet is to describe the products in terms of their safety requirements. The data does not signify any warranty with regard to the products' properties.

The GHS classification data given here is based on current Japan official data (NITE published in 2019).