Date of issue for the 1st edition : 16/10/2013
Date of revision : 04/03/2020

Safety Data Sheet

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

Product identifier:

Product name: Crystal Violet

Product code (SDS NO): 27200jis_E-3

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

Uses advised against: This product is reagent for experiment and research. Do not use for other purposes.

Details of the supplier of the safety data sheet

Manufacturer/Supplier: JUNSEI CHEMICAL CO., LTD.
Address: 1-6, Ohmano-cho, Koshigaya-shi, Saitama 343-0844, Japan
Division: Quality Assurance Department
Telephone number: +81-48-986-6161
FAX: +81-48-989-2787
e-mail address: shiyaku-t@junsei.co.jp

2. Hazards identification

GHS classification and label elements of the product

Classification of the substance or mixture

HEALTH HAZARDS

Acute toxicity (Oral): Category 4

Carcinogenicity: Category 2

Reproductive toxicity: Category 2

Specific target organ toxicity - repeated exposure: Category 2(digestive system, systemic toxicity)

ENVIRONMENT HAZARDS

Hazardous to the aquatic environment (Acute): Category 1

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

(Note) GHS classification without description: Not classified/Classification not possible

Label elements

Signal word: Warning

HAZARD STATEMENT

H302-Harmful if swallowed

H351-Suspected of causing cancer

H361-Suspected of damaging fertility or the unborn child

H373-May cause damage to organs through prolonged or repeated exposure

H400-Very toxic to aquatic life

H410-Very toxic to aquatic life with long lasting effects

PRECAUTIONARY STATEMENT

Prevention

Obtain special instructions before use.

Do not handle until all safety precautions have been read and understood.

Avoid release to the environment.

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

Wash contaminated parts thoroughly after handling.

Use personal protective equipment as required.

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 SWALLOWED: Rinse mouth. Call a POISON CENTER or doctor/physician if you feel unwell.

Disposal

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

3. Composition/information on ingredients

Mixture/Substance selection:

Substance

Common name, synonyms: Hexamethylpararosaniline chloride; C.I. Basic Violet 3 [CI-42555];
Dimethyl(4-Bis[4-(dimethylamino)phenyl]methylidenecyclohexa-2,5-dien-1-ylidene) ammonium chloride

Ingredient name:Crystal Violet

Chemical formula:C25H30ClN3・nH2O(EP…n=9、CP…n=ca. 1.5)

Chemicals No, Japan:4-873; 5-1971

CAS No.:548-62-9(anh)

MW:407.99(anh)

ECNO:208-953-6(anh)

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.

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.

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

In case of fire, use water mist, foam, dry powder, CO2 to extinguish.

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.

Runoff from fire control or dilution water may cause pollution.

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

Keep unauthorized personnel away.

In case of contact with substance, immediately flush skin or eyes with running water for at least 20 minutes.

Ventilate area until material pick up is complete.

Wear proper protective equipment.

Environmental precautions

Avoid release to headsprings, rivers, lakes, ocean and groundwater.

Methods and materials for containment and cleaning up

Absorb or cover with dry earth, sand or other non-combustible material and transfer to containers.

With clean shovel place material into clean, dry container and cover loosely; move containers from spill area.

Preventive measures for secondary accident

Collect spillage.

Stop leak if you can do it without risk.

Prevent dust cloud.

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

Obtain special instructions before use.

Do not handle until all safety precautions have been read and understood.

Wear protective gloves, protective clothing or face protection.

Use personal protective equipment as required.

When using do not eat, drink or smoke.

Any incompatibilities

Strong oxidizing agents should not be mixed with the chemicals.

Advice on general occupational hygiene

Wash contaminated parts thoroughly after handling.

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

Storage

Conditions for safe storage

Store in a well-ventilated place. Keep container tightly closed.

Keep cool. Protect from sunlight.

Container and packaging materials for safe handling data is not available.

8. Exposure controls/personal protection

Control parameters

Control value in MHLW is not available.

Adopted value

Adopted value in JSOH is not available.

Adopted value in ACGIH is not available.

OSHA-PEL value is not available.

NIOSH-REL value is not available.

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. Recommended material(s): nitrile

Consult with your glove and/or personnel equipment manufacturer for selection of appropriate compatible materials.

Eye protection

Wear chemical safety goggle.

Wear eye/face protection.

Skin and body protection

Wear impervious clothing and boots in case of repeated or prolonged treatment.

9. Physical and Chemical Properties

Information on basic physical and chemical properties

Physical state: Crystals～crystalline powder

Color: Dark yellow～Dark green

Odor data is not available.

Odor threshold data is not available.

pH data is not available.

Boiling point or initial boiling point data is not available.

Boiling range data is not available.

Evaporation rate data is not available.

Melting point/Freezing point data is not available.

Decomposition temperature: 215℃

Self-Accelerating Decomposition Temperature/SADT data is not available.

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

Flash point data is not available.

Auto-ignition temperature data is not available.

Critical temperature data is not available.

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

Vapor pressure data is not available.

Vapor density data is not available.

VOC data is not available.

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

Relative density of the Vapor/air - mixture at 20℃ (Air = 1) data is not available.

Density and/or relative density data is not available.

Dynamic viscosity data is not available.

Kinematic viscosity data is not available.
Solubility:
Solubility in water: Slightly soluble
Solubility in solvent data is not available.
n-Octanol/water partition coefficient data is not available.
No Particle characteristics data is not available.

10. Stability and Reactivity

Reactivity data is not available.
Chemical stability
Stable under normal storage/handling conditions.
Possibility of hazardous reactions data is not available.
Conditions to avoid
Contact with incompatible materials.
Open flames. Heat.
Incompatible materials
Strong oxidizing agents
Hazardous decomposition products
Carbon oxides, Nitrogen oxides, Chlorides

11. Toxicological Information

Information on toxicological effects
Acute toxicity
Acute toxicity (Oral)
[GHS Cat. Japan, base data]
(Crystal Violet(anh)) rat LD50=420mg/kg (RTECS, 2007)
Irritant properties
Skin corrosion/irritation data is not available.
Serious eye damage/irritation data is not available.
Allergenic and sensitizing effects data is not available.
Mutagenic effects data is not available.
Carcinogenicity
[GHS Cat. Japan, base data]
(Crystal Violet(anh))
cat.2; EU Cat. 3 (2007) et al.
EU-Category 2; Substances suspected human carcinogens
Reproductive toxicity
[GHS Cat. Japan, base data]
(Crystal Violet(anh)) cat. 2; rat : NTP DB, 2007
STOT
STOT-single exposure data is not available.
STOT-repeated exposure
[cat.2]
[GHS Cat. Japan, base data]
(Crystal Violet(anh)) digestive apparatus; systemic toxicity (RTECS, Access on Sep. 2007)
Aspiration hazard data is not available.
Additional data
Reference data : This product's anhydride (CAS No. 548-62-9)

12. Ecological Information

Ecotoxicity

Aquatic toxicity

H400-Very toxic to aquatic life

H410-Very toxic to aquatic life with long lasting effects

Aquatic acute toxicity component(s) data

(Crystal Violet(anh)) Fish(Oryzias latipes) LC50=100μg/kg/48hr (HSDB)

Water solubility

(Crystal Violet(anh)) 4g/L(25℃) (HSDB; PHYSPROP Database)

Persistence and degradability data is not available.

Bioaccumulative potential

(Crystal Violet(anh)) log Pow=0.96 (PHYSPROP Database)

Mobility in soil data is not available.

Ozone depleting chemical data is not available.

Additional data

Reference data : This product's anhydride (CAS No. 548-62-9)

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., UN CLASS

UN No.: 3077

Proper Shipping Name : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.

Class or division : 9

Packing group : III

ERG GUIDE No.: 171

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

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

Environmental hazards

MARPOL Annex III - Prevention of pollution by harmful substances

Marine pollutants (yes/no) : yes

15. Regulatory Information

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

Environmental hazards

MARPOL Annex V - Prevention of pollution by garbage discharge

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

Crystal Violet

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

Crystal Violet

US major regulations

Chemicals listed in TSCA Inventory

Crystal Violet (anh)

Other regulatory information

We are not able to check up the regulatory information with regard to the substances in your country or region, therefore, we request this matter would be filled by your responsibility.

Regulatory information with regard to this substance in your country or in your region should be examined by your own responsibility.

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

Regulatory information in this section are limited to intentional ingredient(s), but does not contain information on non-intentional ingredients or impurities which are not informed by supplier(s).

16. Other information

GHS classification and labelling

H302-Acute Tox. 4: H302 Harmful if swallowed

H351-Carc. 2: H351 Suspected of causing cancer

H361-Repr. 2: H361 Suspected of damaging fertility or the unborn child

H373-STOT RE 2: H373 May cause damage to organs through prolonged or repeated exposure

H400-Aquatic Acute 1: H400 Very toxic to aquatic life

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

Reference Book

Globally Harmonized System of classification and labelling of chemicals, (6th ed., 2015), UN

Recommendations on the TRANSPORT OF DANGEROUS GOODS 20th edit., 2017 UN

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

IATA Dangerous Goods Regulations (60th Edition) 2019

Classification, labelling and packaging of substances and mixtures (table3-1 ECNO6182012)

2016 EMERGENCY RESPONSE GUIDEBOOK (US DOT)

2019 TLVs and BEIs. (ACGIH)

http://monographs.iarc.fr/ENG/Classification/index.php

JIS Z 7253 : 2019

JIS Z 7252 : 2019

2019 Recommendation on TLVs (JSOH)

Supplier's data/information

Chemicals safety data management system "GHS Assistant" (https://www.asahi-ghs.com/)

NITE Chemical Risk Information Platform(NITE-CHRIP)

https://www.nite.go.jp/en/chem/chrip/chrip_search/systemTop

GHS Classification Guidance for Enterprises 2013 Revised Edition (Aug. 2013, METI)

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 2018).
But the data are partially changed based on our judgement.