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SDS No.160701SC

SAFETY DATA SHEET

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

1.1. Product identifier

Product name: Volatile corrosion control sheet Stealth SK

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

Identified uses: Corrosion control sheet

Uses advised against: No information

1.3. Details of the supplier of the safety data sheet

Name of supplier (importer):

Department in Charge

Address

Telephone number

Fax number e-mail address

Name of manufacturer in Japan: Iwatsu Manufacturing Co.,Ltd.

Department in Charge Engineering Dept.

Address 3309 Shimokoyama, Shimotsuke-shi, Tochigi 329-0502 Japan

Telephone number +81-285-53-1233 Fax number +81-285-53-5713 e-mail address dk.deli@iwatsu.co.jp

1.4. Emergency telephone number

+81-285-53-1233

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification in accordance with EC No 1272/2008:

Skin Corr. 1: H314 Eye Dam. 1: H318 Skin Sens. 1: H317

STOT SE 1: H370 (nervous system, liver)

STOT SE 3: H335

STOT RE 1: H372 (nervous system, testis, gastrointestinal

tract, liver, kidneys, respiratory tract)

Classification in accordance with 1999/45/EC:

T; R39/23-48/23

C; R34 Xi; R41 R43

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2.2. Label elements

In accordance with EC No 1272/2008:

Pictogram







Signal word Danger

Hazard Statements H314: Causes severe skin burns and eye damage

H317: May cause an allergic skin reaction H335: May cause respiratory irritation

H370: Causes damage to nervous system and liver

H372: Causes damage to nervous system, testis, gastrointestinal tract, liver, kidneys, respiratory tract through

prolonged or repeated exposure

Precautionary Statements P261: Avoid breathing dust/fume/gas/mist/vapours/spray.

P264: Wash hands thoroughly after handling.

P303+P361+P353: If on skin (or hair): Take off immediately

all contaminated clothing. Rinse skin with water/shower.

P305+P351+P338: If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to

do. Continue rinsing.

P314: Get medical advice/attention if you feel unwell.

P333+P313: If skin irritation or rash occurs: Get medical

advice/attention.

2.3. Other hazards

The product does not meet the criteria for PBT or vPvB according to Regulation (EC) No 1907/2006, Annex XIII.

SECTION 3: Composition/information on ingredients

3.1. Substances Not applicable

3.2. Mixtures

Product Name: Volatile corrosion control sheet Stealth SK

Information on ingredients:

Chemical name	CAS No.	EC No.	Index No.	REACH Registrat ion No.*	Concen tration (wt %)	Classification**	Specific Concentration limits
Monoetha nolamine	141-43-5	205-483-	603-030- 00-8	-	1-10	CLP Acute Tox. 4: H302 Acute Tox. 3: H311 Acute Tox. 4: H332 Skin Corr. 1B: H314 Eye Dam. 1: H318 Skin Sens. 1: H317	CLP STOT SE 3; H335: $C \ge 5\%$ DSD C; R34: $C \ge 10 \%$

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						STOT SE 1: H370 STOT RE 1: H372 DSD T; 39/23-48/23 Xn; R20/21/22 C; R34	Xi; R36/37/38: 5 %≤ C < 10 %
						Xi; R41 R43	
1,2,3-Ben zotriazole	95-14-7	202-394-	-	-	1-10	CLP Acute Tox. 4: H302 Acute Tox. 4: H332 Eye Irrit. 2: H319 STOT SE 2: H371 STOT SE 3: H336 DSD Xn; R20/22-68/20 Xi; R36 R67	-
Others	-	-	-	-	1-10	-	_
Cellulose	9004-34- 6	-	-	-	80-90	-	-

^{*} Registration numbers of ingredients which shall be in compliance with Regulation (EC) No 1907/2006 will be filled in later.

SECTION 4: First aid measures

	4.1.	Descri	ption o	f first	aid	measures
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IF INHALED Remove victim to fresh air and keep at rest in a position

comfortable for breathing.

If symptoms continue, call a doctor/physician.

IF ON SKIN Rinse with plenty of water.

If symptoms continue, call a doctor/physician.

IF IN EYES Immediately rinse cautiously with water for 15 - 20 minutes.

Remove contact lenses, if present and easy to do. Continue

rinsing. If symptoms continue, call a doctor/physician.

IF SWALLOWED Rinse mouth. Immediately get medical advice/attention.

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

Causes severe skin burns and eye damage

May cause an allergic skin reaction

Causes damage to nervous system and liver

Causes damage to nervous system, testis, gastrointestinal tract, liver, kidneys, respiratory tract through prolonged or repeated exposure

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

No information

SECTION 5: Firefighting measures

5.1. Extinguishing media

^{**} Full texts of relevant hazard statements and risk phrases can be seen in SECTION 16 of this SDS.

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Suitable extinguishing media:

Use water mist, dry chemical powder, fire foam.

Unsuitable extinguishing media

Carbon dioxide fire extinguishing is unsuitable for paper products.

5.2. Special hazards arising from the substance or mixture

Irritating, corrosive and toxic gases may be generated in fire.

5.3. Advice for firefighters

Cut off any ignition sources and extinguish with an appropriate agent.

Cool the surrounding tank and the buildings with direct water jet to avoid risk of fire spreading.

Take action from windward.

Keep out except responsible personnel.

Move container to a safe area if it can be done without risk.

Fire fighters should wear appropriate supplied air respirators and fire and heat protective clothing to protect eyes and skin.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

For non-emergency personnel:

Keep out except responsible personnel.

For emergency responders:

Wear suitable protective equipment described in "SECTION 8: Exposure controls/personal protection".

6.2. Environmental precautions

Avoid release into the environment because product may cause local effects.

6.3. Methods and material for containment and cleaning up

Sweep up scattered materials or vacuum them using a vacuum cleaner so as not to cause dust then collect them into an empty container.

Do not eat or drink near handling and storage locations.

ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area).

Prevent to flowing into drains, sewers, basements or closed areas.

6.4. Reference to other sections

Refer to "SECTION 8: Exposure controls/personal protection" and "SECTION 13: Disposal considerations" as appropriate.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Protective measures:

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Install appropriate equipment and wear suitable protective apparatus described in "SECTION 8:

Exposure controls/ personal protection".

Avoid high temperature.

Advice on general occupational hygiene:

Wash hands thoroughly after handling.

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

7.2. Conditions for safe storage, including any incompatibilities

Technical measures:

In the storage area, install adequate light and ventilation systems to handle hazardous materials. Take precautionary measures against static discharge.

Incompatible materials:

Oxidizing agents

Conditions for safe storage:

Avoid direct sunlight, heat, fire and oxidizing agents.

Avoid storing under high temperature and high humidity.

Packing material:

Use package materials that can prevent rain or water wet.

7.3. Specific end use(s)

Corrosion control sheet

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Acceptable concentration (exposure limit, biological exposure index)

EU IOELV Not applicable

ACGIH TLV-TWA (2014) 3 ppm (Ethanolamine)

10 mg/m³ (Cellulose)

ACGIH TLV-STEL (2014) 6 ppm (Ethanolamine)

8.2. Exposure controls

Appropriate engineering controls:

In a work place where dusts generate, ensure to use sealed instrument or local ventilation.

Personal protective equipment:

or air aspirator as required.

Hand protection When handling the product, wear protective gloves.

Eye protection Wear safety glasses or goggles if necessary.

Skin and body protection Wear protective clothing and apron if necessary.

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SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Roll state or sheet type solid. **Appearance**

(physical state, form and colour)

Odour No information Odour threshold No information No information pН Melting point/freezing point No information No information Initial boiling point and boiling range Flash point No information No information Evaporation rate No information Flammability (solid, gas) No information Upper/lower flammability or

explosive limits

Vapour pressure No information No information Vapour density No information Relative density No information Solubility (ies) Partition coefficient: *n*-octanol/water No information

291°C Auto-ignition temperature

No information Decomposition temperature No information Viscosity Explosive properties No information Oxidising properties No information

9.2. Other information

No information

SECTION 10: Stability and reactivity

10.1. Reactivity

Stable under normal handling condition.

10.2. Chemical stability

Stable under normal handling condition.

10.3. Possibility of hazardous reactions

No hazardous reaction expected under normal handling.

10.4. Conditions to avoid

Avoid sunlight. Store in a cool place.

10.5. Incompatible materials

Oxidizing agents, reducing agents

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10.6. Hazardous decomposition products

In combustion, toxic decomposition products may be generated.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Information on product: No information

Information on ingredients:

Monoethanolamine

Acute toxicity (oral): Rat $LD_{50} = 3,320 \text{ mg/kg}$ Acute toxicity (dermal): Rabbit $LD_{50} = 1,000 \text{ mg/kg}$

Acute toxicity (inhalation: dust/mist): Classified as "Acute Tox. 4: H332" according to EC No

1272/2008.

Skin corrosion/irritation:

Based on the description in the report on animal skin irritation

tests. "Corrosive" and "irritating, necrosis," the substance is

thus considered "corrosive."

Serious eye damage/irritation: Based on the description in the report on rabbit eye irritation

tests. "Extremely irritating, causing corneal opacity and iris/conjunctival swelling," the substance is considered "extremely irritating to the eye and corrosive to the skin and

eye."

Classified as "Skin Corr. 1B: H314" according to EC No

1272/2008.

Skin sensitization: There is a human case of occupational exposure on some 100

people, showing positive results in the study employing the

non-diluted substance.

STOT-single exposure: In human, "headache, nausea, hyposthenia, dizziness,

numbness in fingertips, pectoralgia" and "enlargement of the liver, an increase in serum ALT levels and alkaline phosphatase activity, chronic hepatitis (in six month's time)" were reported. In the animal studies, "ataxia, convulsions,"

and "hepatocellular fatty degeneration" were reported.

STOT-repeated exposure: In the animal studies, "a decrease in locomotor activity,

lethargy, skin irritation, irregular respiration, decease (83%) - with spermatogenesis inhibition and adverse effects on alimentary canal (degeneration of the small intestine wall, intestinal blockage due to dehydrated excrement) were reported on the deceased subjects. Those in rodents include: hepatocellular fatty degeneration, an increase in lymphoid

tissues in the pulmonary interstitium.

1,2,3-Benzotriazole

Rat $LD_{50} = 560 \text{ mg/kg}$

Acute toxicity (oral): Rat $LD_{50} = 600 \text{ mg/kg}$

Rat $LD_{50} = 965 \text{ mg/kg}$

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Acute toxicity (dermal): Rat LD₅₀ >10000 mg/kg

Acute toxicity (inhalation: dust/mist):

Rat $LC_{50} = 1.9 \text{ mg/L/3h}$ (= 1.43 mg/L/4h)

Skin corrosion/irritation:

No irritation was observed in rabbit tests.

Serious eye damage/irritation:

In a rabbit test, corneal opacity, conjunctivitis and reddening

of conjunctivas and irises were observed.

STOT-single exposure:

In an inhalation toxicity test with rats (LC₅₀: 1.43 mg/L/4h), deep abdominal breathing with open mouth gasping and

severe in the lungs were observed.

In an oral toxicity test with rats, depressed righting and

placement reflexes, absence of pain were observed.

SECTION 12: Ecological information

12.1. Toxicity:

Information on product:

No information

Information on ingredients:

Monoethanolamine

Aquatic acute toxicity:

Algae (Pseudokirchneriella subcapitata)72h ErC₅₀=2.5mg/L

Aquatic chronic toxicity:

No information

12.2. Persistence and degradability:

Information on product:

No information

Information on ingredients:

Monoethanolamine

Biodegradability by BOD = 83%

12.3. Bioaccumulative potential:

Information on product:

No information

Information on ingredients:

No information

12.4. Mobility in soil:

Information on product:

No information

Information on ingredients:

No information

12.5. Results of PBT and vPvB assessment:

The product does not meet the PBT and vPvB criteria.

12.6. Other adverse effects:

No information

SECTION 13: Disposal considerations

13.1. Waste treatment methods

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Dispose of waste in accordance with applicable local, regional and international regulations and standards.

When disposing, consult to a certificated waste trader or local offices if they deal with the waste.

Used container should be recycled after cleaning or dispose of in compliance with related laws and local regulations.

Contents should be removed completely when dispose of empty containers.

SECTION 14: Transport information

14.1. UN number	Not applicable
14.2. UN proper shipping name	Not applicable
14.3. Transport hazard class(es)	Not applicable
14.4. Packing group	Not applicable
14.5. Environmental hazards	Not applicable

14.6. Special precautions for user

When transporting, avoid direct sunlight. Confirm no leakage to containers. When loading, prevent containers from falling, dropping off or damaging. Take preventive measures of collapse.

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and IBC code

Not applicable

SECTION 15: Regulatory information

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

The product and its ingredients are not regulated by specific provisions related to protection of human health or the environment at EU level, e.g. not considered as SVHCs or POPs.

15.2. Chemical safety assessment

Not conducted

SECTION 16: Other information

Update history:

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References:

Information of Iwatsu Manufacturing Co.,Ltd

NITE GHS classification results (2014).

ACGIH, American Conference of Governmental Industrial Hygienists (2014) TLVs and BEIs.

Relevant risk phrases of which do not appear elsewhere in this SDS

H302: Harmful if swallowed

H311: Toxic in contact with skin

H318: Causes serious eye damage

H319: Causes serious eye irritation

H332: Harmful if inhaled

H336: May cause drowsiness or dizziness

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H371: May cause damage to respiratory tract

R20/21/22: Harmful by inhalation, in contact with skin and if swallowed.

R34: Causes burns.

R36: Irritating to eyes.

R39/23: Toxic: danger of very serious irreversible effects through inhalation.

R41: Risk of serious damage to eyes.

R43: May cause sensitisation by skin contact.

R48/23: Toxic: danger of serious damage to health by prolonged exposure through inhalation.

R68/20: Harmful: possible risk of irreversible effects through inhalation.

R67: Vapours may cause drowsiness and dizziness.

Abbreviations

PBT: Persistent, Bioaccumulative and Toxic substance

POPs: Persistent Organic Pollutants STOT: Specific Target Organ Toxicity SVHC: Substances of Very High Concern

vPvB: Very Persistent and Very Bioaccumulative

[Disclaimer]

This SDS has been prepared based on the best available information however, it may not be sufficient in some cases. It is user's responsibility to modify or update any contents in this SDS regarding information on hazardous properties and/or instruction for safe handling of the product when they become available. Precautionary measures in this SDS are only applicable for normal handling conditions and it is necessary to take appropriate additional measures to ensure safe handling which depend on your specific use conditions or situations.