OWATROL CHOUKROUT - CKRT01_HCS

Date: 02/09/2016 Page 1/10

Revision: N°1 (02/09/2016)

SAFETY DATA SHEET

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

1.1. Product identifier

Product name: OWATROL CHOUKROUT

Product code: CKRT01_HCS.

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

Filler

1.3. Details of the supplier of the safety data sheet

Registered company name: DURIEU S.A..

Address: Z.I. "La Marinière" 2 bis, rue Charles de Gaulle.91070.BONDOUFLE.FRANCE.

Telephone: +33(0)1.60.86.48.70. Fax: +33(0)1.60.86.84.84.

info@durieu.com www.durieu.com

1.4. Emergency telephone number: + 33 (0)1.45.42.59.59.

Association/Organisation: INRS / ORFILA http://www.centres-antipoison.net.

SECTION 2: HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

HCS compliant.

Flammable liquid, Category 3 (Flam. Liq. 3).

Acute inhalation toxicity, Category 4 (Acute Tox. 4).

Skin irritation, Category 2 (Skin Irrit. 2).

Reproductive toxicity, Category 2 (Repr. 2).

Specific target organ toxicity (repeated exposure), Category 1 (STOT RE 1).

2.2. Label elements

HCS compliant.

Hazard pictograms:







GHS07

GHS08

GHS02

Signal Word : DANGER

Product identifiers :

CAS 100-42-5 STYRENE

Hazard statements:

H226 Flammable liquid and vapour.

H315 Causes skin irritation.
H319 Causes serious eye irritation.

H332 Harmful if inhaled.

H361 Suspected of damaging fertility or the unborn child.

H372 Causes damage to organs through prolonged or repeated exposure (hearing) (if inhaled).

Precautionary statements - General:

P102 Keep out of reach of children.

Precautionary statements - Prevention:

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

P264 Wash ... thoroughly after handling.

P271 Use only outdoors or in a well-ventilated area.

Precautionary statements - Response:

P302 + P352 IF ON SKIN: Wash with plenty of soap and water.

OWATROL CHOUKROUT - CKRT01 HCS

Date: 02/09/2016 Page 2/10 Revision: N°1 (02/09/2016)

P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to

do. Continue rinsing.

P332 + P313 If skin irritation occurs: Get medical advice/attention.

2.3. Other hazards

No data available.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.2. Mixtures

Composition:

Identification	HCS	Nota	%
INDEX: 601-026-00-0	GHS02, GHS08, GHS07	[1]	25 <= x % < 50
CAS: 100-42-5	Dgr	[2]	
EC: 202-851-5	Flam. Liq. 3, H226		
	Repr. 2, H361		
STYRENE	Acute Tox. 4, H332		
	STOT RE 1, H372		
	Skin Irrit. 2, H315		
	Eye Irrit. 2, H319		

Information on ingredients:

- [1] Substance for which maximum workplace exposure limits are available.
- [2] Carcinogenic, mutagenic or reprotoxic (CMR) substance.

SECTION 4 : FIRST AID MEASURES

As a general rule, in case of doubt or if symptoms persist, always call a doctor.

NEVER induce swallowing by an unconscious person.

4.1. Description of first aid measures

In the event of exposure by inhalation:

In the event of massive inhalation, remove the person exposed to fresh air. Keep warm and at rest.

If the person is unconscious, place in recovery position. Notify a doctor in all events, to ascertain whether observation and supportive hospital care will be necessary.

If breathing is irregular or has stopped, effect mouth-to-mouth resuscitation and call a doctor.

Do not proceed with mouth-to-mouth or mouth-to-nose resuscitation. Use the appropriate equipment.

In the event of splashes or contact with eyes:

Wash thoroughly with fresh, clean water for 15 minutes holding the eyelids open.

If there is any redness, pain or visual impairment, consult an ophthalmologist.

In the event of splashes or contact with skin:

Remove contaminated clothing and wash the skin thoroughly with soap and water or a recognised cleaner.

Watch out for any remaining product between skin and clothing, watches, shoes, etc.

If the contaminated area is widespread and/or there is damage to the skin, a doctor must be consulted or the patient transferred to hospital.

In the event of swallowing:

Do not give the patient anything orally.

In the event of swallowing, if the quantity is small (no more than one mouthful), rinse the mouth with water and consult a doctor.

Keep the person exposed at rest. Do not force vomiting.

Seek medical attention immediately, showing the label.

If swallowed accidentally, call a doctor to ascertain whether observation and hospital care will be necessary. Show the label.

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

No data available.

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

No data available.

SECTION 5 : FIREFIGHTING MEASURES

Flammable.

Chemical powders, carbon dioxide and other extinguishing gas are suitable for small fires.

5.1. Extinguishing media

Keep packages near the fire cool, to prevent pressurised containers from bursting.

OWATROL CHOUKROUT - CKRT01_HCS

Date: 02/09/2016 Page 3/10

Revision: N°1 (02/09/2016)

Suitable methods of extinction

In the event of a fire, use:

- sprayed water or water mist
- water with AFFF (Aqueous Film Forming Foam) additive
- halon
- foam
- multipurpose ABC powder
- BC powder
- carbon dioxide (CO2)

Prevent the effluent of fire-fighting measures from entering drains or waterways.

Unsuitable methods of extinction

In the event of a fire, do not use:

Direct water jets

5.2. Special hazards arising from the substance or mixture

A fire will often produce a thick black smoke. Exposure to decomposition products may be hazardous to health.

Do not breathe in smoke.

In the event of a fire, the following may be formed:

- carbon monoxide (CO)
- carbon dioxide (CO2)

5.3. Advice for firefighters

Fire-fighting personnel are to be equipped with autonomous insulating breathing apparatus.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

Consult the safety measures listed under headings 7 and 8.

For non first aid worker

Because of the organic solvents contained in the mixture, eliminate sources of ignition and ventilate the area.

Avoid inhaling the vapors.

Avoid any contact with the skin and eyes.

If a large quantity has been spilt, evacuate all personnel and only allow intervention by trained operators equipped with safety apparatus.

For first aid worker

First aid workers will be equipped with suitable personal protective equipment (See section 8).

6.2. Environmental precautions

Contain and control the leaks or spills with non-combustible absorbent materials such as sand, earth, vermiculite, diatomaceous earth in drums for waste disposal.

Prevent any material from entering drains or waterways.

If the product contaminates waterways, rivers or drains, alert the relevant authorities in accordance with statutory procedures

Use drums to dispose of collected waste in compliance with current regulations (see section 13).

6.3. Methods and material for containment and cleaning up

Clean preferably with a detergent, do not use solvents.

6.4. Reference to other sections

No data available.

SECTION 7: HANDLING AND STORAGE

Requirements relating to storage premises apply to all facilities where the mixture is handled.

Avoid exposure to pregnant women and warn women of child-bearing age of the possible risks

7.1. Precautions for safe handling

Always wash hands after handling.

Remove and wash contaminated clothing before re-using.

Ensure that there is adequate ventilation, especially in confined areas.

Remove contaminated clothing and protective equipment before entering eating areas.

Fire prevention:

Handle in well-ventilated areas.

Vapours are heavier than air. They can spread along the ground and form mixtures that are explosive with air.

OWATROL CHOUKROUT - CKRT01 HCS

Prevent the formation of flammable or explosive concentrations in air and avoid vapor concentrations higher than the occupational exposure limits.

Date: 02/09/2016 Page 4/10 Revision: N°1 (02/09/2016)

Prevent the accumulation of electrostatic charges with connections to earth.

The mixture can become electrostatically charged: always earth during decanting operations. Wear antistatic shoes and clothing and floors should be electrically conductive.

Use the mixture in premises free of naked flames or other sources of ignition and ensure that electrical equipment is suitably protected.

Keep packages tightly closed and away from sources of heat, sparks and naked flames.

Do not use tools which may produce sparks. Do not smoke.

Prevent access by unauthorised personnel.

Recommended equipment and procedures:

For personal protection, see section 8.

Observe precautions stated on label and also industrial safety regulations.

For paint products, avoid breathing dust, particles or vapours from the treatment of surfaces coated with this mixture by dry sanding or by hot working (welding, soldering, cutting, etc).

Avoid inhaling vapors. Carry out any industrial operation which may give rise to this in a sealed apparatus.

Provide vapor extraction at the emission source and also general ventilation of the premises.

Also provide breathing apparatus for certain short tasks of an exceptional nature and for emergency interventions.

In all cases, recover emissions at source.

Avoid skin and eye contact with this mixture.

Avoid exposure - obtain special instructions before use.

Packages which have been opened must be reclosed carefully and stored in an upright position.

Prohibited equipment and procedures:

No smoking, eating or drinking in areas where the mixture is used.

Never open the packages under pressure.

7.2. Conditions for safe storage, including any incompatibilities

No data available.

Storage

Keep out of reach of children.

Keep the container tightly closed in a dry, well-ventilated place.

Keep away from all sources of ignition - do not smoke.

Keep well away from all sources of ignition, heat and direct sunlight.

Avoid accumulation of electrostatic charges.

The floor must be impermeable and form a collecting basin so that, in the event of an accidental spillage, the liquid cannot spread beyond this area.

Packaging

Always keep in packaging made of an identical material to the original.

7.3. Specific end use(s)

No data available.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters

Occupational exposure limits:

- ACGIH TLV (American Conference of Governmental Industrial Hygienists, Threshold Limit Values, 2010):

100-42-5 20 ppm 40 ppm A4; BEI	CAS	TWA:	STEL:	Ceiling:	Definition:	Criteria:
	100-42-5	20 ppm	4U nnm		A4; BEI	

- Germany - AGW (BAuA - TRGS 900, 21/06/2010) :

	(, -	
CAS	VME:	VME:	Excess	Notes
100-42-5		20 ppm		2(II)
		86 mg/m3		

- France (INRS - ED984 :2012) :

CAS	VME-ppm:	VME-mg/m3:	VLE-ppm:	VLE-mg/m3:	Notes:	TMP No:
100-42-5	46.6	200	23.3	100	Peau/Bruit	84

- UK / WEL (Workplace exposure limits, EH40/2005, 2007):

CAS	TWA:	STEL:	Ceiling:	Definition:	Criteria:
100-42-5	100 ppm	250 ppm			
	430 mg/m3	1080 mg/m3			

OWATROL CHOUKROUT - CKRT01 HCS

Date: 02/09/2016 Page 5/10

Revision: N°1 (02/09/2016)

8.2. Exposure controls

Personal protection measures, such as personal protective equipment

Use personal protective equipment that is clean and has been properly maintained.

Store personal protective equipment in a clean place, away from the work area.

Never eat, drink or smoke during use. Remove and wash contaminated clothing before re-using. Ensure that there is adequate ventilation, especially in confined areas.

- Eye / face protection

Avoid contact with eyes.

Use eye protectors designed to protect against liquid splashes

Before handling, wear safety goggles with protective sides accordance with standard EN166.

In the event of high danger, protect the face with a face shield.

Prescription glasses are not considered as protection.

Individuals wearing contact lenses should wear prescription glasses during work where they may be exposed to irritant vapours.

Provide eyewash stations in facilities where the product is handled constantly.

- Hand protection

Use suitable protective gloves that are resistant to chemical agents in accordance with standard EN374.

Gloves must be selected according to the application and duration of use at the workstation.

Protective gloves need to be selected according to their suitability for the workstation in question: other chemical products that may be handled, necessary physical protections (cutting, pricking, heat protection), level of dexterity required.

Type of gloves recommended:

- Nitrile rubber (butadiene-acrylonitrile copolymer rubber (NBR))
- PVA (Polyvinyl alcohol)

Recommended properties:

- Impervious gloves in accordance with standard EN374

- Body protection

Avoid skin contact.

Wear suitable protective clothing.

Suitable type of protective clothing:

In the event of substantial spatter, wear liquid-tight protective clothing against chemical risks (type 3) in accordance with EN14605 to prevent skin contact.

In the event of a risk of splashing, wear protective clothing against chemical risks (type 6) in accordance with EN13034 to prevent skin contact.

Work clothing worn by personnel shall be laundered regularly.

After contact with the product, all parts of the body that have been soiled must be washed.

- Respiratory protection

Avoid breathing vapours.

If the ventilation is insufficient, wear appropriate breathing apparatus.

When workers are confronted with concentrations that are above occupational exposure limits, they must wear a suitable, approved, respiratory protection device.

Type of FFP mask:

Wear a disposable half-mask dust filter in accordance with standard EN149.

Category:

- FFP2

Type of mask with combined filters:

Wear a half mask in accordance with standard EN140.

Anti-gas and vapour filter(s) (Combined filters) in accordance with standard EN14387:

- A1 (Brown)
- A3 (Brown)
- A2 (Brown)

Particle filter according to standard EN143:

- P2 (White)

OWATROL CHOUKROUT - CKRT01_HCS

Date: 02/09/2016 Page 6/10

Revision: N°1 (02/09/2016)

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

General information:

Physical state: Viscous liquid.

Important health, safety and environmental information

pH: Not relevant.
Boiling point/boiling range: Not relevant.

Flash Point Interval : $23^{\circ}\text{C} (73.4^{\circ}\text{F}) <= \text{FP} <= 60^{\circ}\text{C} (140^{\circ}\text{F})$

Explosive properties, lower explosivity limit (%):

1.1 (Styrene)
Explosive properties, upper explosivity limit (%):

8 (Styrene)
Vapour pressure (50°C):

Not relevant.

Vapour density: >1
Density: >1

Miscibility: Non miscible dans l'eau

Water solubility: Insoluble.

Melting point/melting range: Not specified.

Self-ignition temperature: Not relevant.

Decomposition point/decomposition range: Not relevant.

% VOC: <25%

9.2. Other information

VOC (g/l): 250

SECTION 10: STABILITY AND REACTIVITY

10.1. Reactivity

No data available.

10.2. Chemical stability

This mixture is stable under the recommended handling and storage conditions in section 7.

10.3. Possibility of hazardous reactions

When exposed to high temperatures, the mixture can release hazardous decomposition products, such as carbon monoxide and dioxide, fumes and nitrogen oxide.

10.4. Conditions to avoid

Any apparatus likely to produce a flame or to have a metallic surface at high temperature (burners, electric arcs, furnaces etc.) must not be allowed on the premises.

Avoid:

- accumulation of electrostatic charges.
- heating
- heat
- flames and hot surfaces

Keep away from corrosive agents such as strong acids or alkalines to avoid possible leakage or self combustion.

Keep away from sources of heat, sparks and naked flames.

Temperatures exceeding 50°C . Sparks or other sources of ignition.

10.5. Incompatible materials

Do not put in contact with strong corrosive agents.

10.6. Hazardous decomposition products

The thermal decomposition may release/form:

- carbon monoxide (CO)
- carbon dioxide (CO2)

Stable under normal conditions.

OWATROL CHOUKROUT - CKRT01 HCS

Date: 02/09/2016 Page 7/10

Revision: N°1 (02/09/2016)

SECTION 11: TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects

Exposure to vapours from solvents in the mixture in excess of the stated occupational exposure limit may result in adverse health effects such as mucous membrane and respiratory system irritation and adverse effects on kidney, liver and central nervous system.

Symptoms produced will include headaches, numbness, dizziness, fatigue, muscular asthenia and, in extreme cases, loss of consciousness.

Harmful by inhalation.

May cause irreversible damage to the skin; namely inflammation of the skin or the formation of erythema and eschar or oedema following exposure up to four hours.

Repeated or prolonged contact with the mixture may cause removal of natural oil from the skin resulting in non-allergic contact dermatitis and absorption through the skin.

May have reversible effects on the eyes, such as eye irritation which is totally reversible by the end of observation at 21 days.

Splashes in the eyes may cause irritation and reversible damage

Suspected human reproductive toxicant.

Causes severe damage to organs in the event of repeated or prolonged exposure.

11.1.1. Substances

No toxicological data available for the substances.

11.1.2. Mixture

No toxicological data available for the mixture.

Monograph(s) from the IARC (International Agency for Research on Cancer):

CAS 100-42-5: IARC Group 2B: The agent is possibly carcinogenic to humans.

SECTION 12: ECOLOGICAL INFORMATION

The product must not be allowed to run into drains or waterways.

12.1. Toxicity

Probably low dangerous to aquatic organisms

12.1.2. Mixtures

No aquatic toxicity data available for the mixture.

12.2. Persistence and degradability

Biodegradable

12.3. Bioaccumulative potential

Potentially not bioaccumulable

12.4. Mobility in soil

Rapidly absorbed by the earth.

12.5. Results of PBT and vPvB assessment

PBT: This product is not identified as a PBT substance.

12.6. Other adverse effects

Other adverse effects: Negligible ecotoxicity.

SECTION 13: DISPOSAL CONSIDERATIONS

The appropriate waste management of the mixture and/or its container must be determined in accordance with local regulations.

13.1. Waste treatment methods

Do not pour into drains or waterways.

Waste:

Waste management is carried out without endangering human health, without harming the environment and, in particular without risk to water, air, soil, plants or animals.

Recycle or dispose of waste in compliance with current legislation, preferably via a certified collector or company.

Do not contaminate the ground or water with waste, do not dispose of waste into the environment.

Soiled packaging:

Empty container completely. Keep label(s) on container.

Give to a certified disposal contractor.

OWATROL CHOUKROUT - CKRT01_HCS

Date: 02/09/2016 Page 8/10

Revision: N°1 (02/09/2016)

SECTION 14: TRANSPORT INFORMATION

Transport product in compliance with provisions of the ADR for road, RID for rail, IMDG for sea and ICAO/IATA for air transport (ADR 2015 - IMDG 2014 - ICAO/IATA 2016).

14.1. UN number

3269

14.2. UN proper shipping name

UN3269=POLYESTER RESIN KIT

14.3. Transport hazard class(es)

- Classification:



14.4. Packing group

III

14.5. Environmental hazards

_

14.6. Special precautions for user

ADR/RID	Class	Code	Pack gr.	Label	Ident.	LQ	Provis.	EQ	Cat.	Tunnel
	3	F3	III	3	-	5 L	236 340	E0	3	E

Not subject to this regulation if Q < 4501.

IMDG	Class	2°Label	Pack gr.	LQ	EMS	Provis.	EQ
	3	-	III	5 L	F-E,S-D	236 340	See SP340

Not subject to this regulation if Q < 30l

IATA	Class	2°Label	Pack gr.	Passager	Passager	Cargo	Cargo	note	EQ
	3	-	III	370	10 kg	370	10 kg	A66	E0
								A163	
	3	-	III	Y370	5 kg	-	-	A66	E0
								A163	

For limited quantities, see part 2.7 of the OACI/IATA and chapter 3.4 of the ADR and IMDG.

For excepted quantities, see part 2.6 of the OACI/IATA and chapter 3.5 of the ADR and IMDG.

14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

No data available.

SECTION 15: REGULATORY INFORMATION

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

The following regulations have been used:

- OSHA Hazard Communication Standard 29 CFR 1910.1200

- Container information:

No data available.

- Particular provisions :

No data available.

- Standardised American system for the identification of hazards presented by the product in view of emergency procedures (NFPA 704)

NFPA 704, Labelling: Health=3 Inflammability=2 Instability/Reactivity=1 Specific Risk=none



SAFETY DATA SHEET (HCS, Annexe D table D.1)

Version: N°1 (02/09/2016)

DURIEU S.A.

OWATROL CHOUKROUT - CKRT01_HCS

Date: 02/09/2016 Page 9/10 Revision: N°1 (02/09/2016)

- Clean Water Act : Toxic Pollutants (CWA 307A)

Unlisted.

- Clean Water Act : Hazardous Substances (CWA 311)

CAS Name 100-42-5 STYRENE

- Clean Water Act : Hazardous Substances (CWA 304b)

Unlisted.

- Clean Water Act: Priority Pollutants (CWA Priority)

Unlisted.

- Clean Air Act: Hazardous Air Pollutants (CAA 112(b) HAP (188))

CAS Name 100-42-5 STYRENE

- Clean Air Act: Organic Hazardous Air Pollutants National Emission Standards (CAA 112(b) HON (387))

CAS Name 100-42-5 STYRENE

- Clean Air Act : Protection of Stratospheric Ozone (CAA 602)

Unlisted.

- SARA 110

CAS Name 100-42-5 STYRENE

- SARA 302/304

Unlisted.

- SARA 313

CAS Name 100-42-5 STYRENE

- California proposition 65: Chemicals known to the state to cause cancer or reproductive toxicity

Unlisted.

100-42-5

Massachusetts: Right to Know
 CAS Name
 100-42-5 STYRENE
 New Jersey: Right to Know

CAS Name 100-42-5 STYRENE - Pennsylvania : Hazardous Substance CAS Name

- Rhode Island : Hazardous substance list

CAS Name 100-42-5 STYRENE

- TSCA (Toxic Substances Control Act) - USA

STYRENE

All components are listed or exempted.

15.2. Chemical safety assessment

No data available.

SECTION 16: OTHER INFORMATION

Since the user's working conditions are not known by us, the information supplied on this safety data sheet is based on our current level of knowledge and on national and community regulations.

The mixture must not be used for other uses than those specified in section 1 without having first obtained written handling instructions.

It is at all times the responsibility of the user to take all necessary measures to comply with legal requirements and local regulations.

The information in this safety data sheet must be regarded as a description of the safety requirements relating to the mixture and not as a guarantee of the properties thereof.

Wording of the phrases mentioned in section 3:

H226 Flammable liquid and vapour.

H315 Causes skin irritation. H319 Causes serious eye irritation. SAFETY DATA SHEET (HCS, Annexe D table D.1)

Version: N°1 (02/09/2016)

DURIEU S.A.

OWATROL CHOUKROUT - CKRT01_HCS

Date: 02/09/2016 Page 10/10

Revision: N°1 (02/09/2016)

H332 Harmful if inhaled.

H360 May damage fertility or the unborn child .

H372 Causes damage to organs through prolonged or repeated exposure .

Abbreviations:

CMR: Carcinogenic, mutagenic or reprotoxic.

ADR: European agreement concerning the international carriage of dangerous goods by Road.

IMDG: International Maritime Dangerous Goods. IATA: International Air Transport Association. ICAO: International Civil Aviation Organisation

RID: Regulations concerning the International carriage of Dangerous goods by rail.

GHS02: Flame

GHS07 : Exclamation mark GHS08 : Health hazard

PBT: Persistent, bioaccumulable and toxic. vPvB: Very persistent, very bioaccumulable. HCS: Hazard Communication standard (OSHA).