

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878 Issue date: 03/05/2017 Revision date: 21/08/2023 Supersedes version of: 07/12/2022 Version: 5.0

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

1.1. Product identifier

Product form	: Mixture
Trade name	: Knockout Spirits of Salts
UFI	: FKC0-60U7-Y00D-QSCV
EC-No.	: 231-595-7
CAS-No.	: 7647-01-0
Product code	: SOSAGEN
Type of product	: Acids

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

1.2.1. Relevant identified uses

Intended for general public

Main use category Use of the substance/mixture : Industrial use,Professional use,Consumer use: Cleaning/washing agents and additives

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

Manufacturer	EU
J.V. Barrett & Co. Ltd Ltd	Barrettine (Europe) Ltd Ltd
St Ivel Way Warmley	Unit 3D North Point House, North Point Business Park, New Mallow Road
United Kingdom– BS30 8TY Bristol	Ireland– T23 AT2P Cork
United Kingdom	Ireland
T +44 (0)1179 60 00 60	T +353 21 206 6530
sales@barrettine.co.uk - www.barrettine.co.uk	sales@barrettine.co.uk - www.barrettine.co.uk

1.4. Emergency telephone number

Emergency number

: +44 (0) 1179 600060 (Office hours only 8am - 5pm Mon- Thurs. 8 am - 4.30 pm Fri.) +44 (0) 1270 502891 (Out of hours emergency number)

Country	Organisation/Company	Address	Emergency number	Comment
United Kingdom	National Poisons Information Service (Birmingham Centre) City Hospital	Dudley Road B18 7QH	0344 892 0111	Only for healthcare professionals
United Kingdom	NHS 111/NHS 24/NHS Direct		111 0845 4647	or call a doctor

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/20	008 [CLP]
Corrosive to metals, Category 1	H290
Skin corrosion/irritation, Category 2	H315
Serious eye damage/eye irritation, Category 2	H319
Full text of H- and EUH-statements: see section 16	

Adverse physicochemical, human health and environmental effects

May be corrosive to metals. May cause respiratory irritation. Causes severe skin burns and eye damage.

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Labelling according to Regulation (EC)	No. 1272/2008 [CLP]
Hazard pictograms (CLP)	GHS07
Signal word (CLP)	: Warning
Hazard statements (CLP)	: H290 - May be corrosive to metals. H315 - Causes skin irritation. H319 - Causes serious eye irritation.
Precautionary statements (CLP)	 P101 - If medical advice is needed, have product container or label at hand. P102 - Keep out of reach of children. P234 - Keep only in original packaging. P264 - Wash hands thoroughly after handling. P280 - Wear protective gloves, protective clothing, eye protection. P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P337+P313 - If eye irritation persists: Get medical advice/attention. P501 - Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.
Child-resistant fastening	: Not applicable
Tactile warning	: Not applicable

2.3. Other hazards

Contains no PBT/vPvB substances ≥ 0.1% assessed in accordance with REACH Annex XIII

The mixture does not contain substance(s) included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or is not identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at a concentration equal to or greater than 0,1 %

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

2.0 Mixt

3.2. MIXtures			
Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
hydrochloric acid %	EC-No.: 231-595-7 EC Index-No.: 017-002-01-X REACH-no: 01-2119484862- 27	≥ 5 – < 10	Skin Corr. 1B, H314 STOT SE 3, H335

Specific concentration limits:

Name	Product identifier	Specific concentration limits (%)
hydrochloric acid %	EC-No.: 231-595-7 EC Index-No.: 017-002-01-X REACH-no: 01-2119484862- 27	$(10 \le C < 25)$ Skin Irrit. 2, H315 $(10 \le C < 25)$ Eye Irrit. 2, H319 $(10 \le C \le 100)$ STOT SE 3, H335 $(25 \le C \le 100)$ Skin Corr. 1B, H314

Full text of H- and EUH-statements: see section 16

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SECTION 4: First aid measures	
4.1. Description of first aid measures	
First-aid measures general	: Call a physician immediately.
First-aid measures after inhalation	: Remove person to fresh air and keep comfortable for breathing. Call a poison center or a doctor if you feel unwell.
First-aid measures after skin contact	: Rinse skin with water/shower. Take off immediately all contaminated clothing. Call a physician immediately.
First-aid measures after eye contact	: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Call a physician immediately.
First-aid measures after ingestion	: Rinse mouth. Do not induce vomiting. Call a physician immediately.
4.2. Most important symptoms and effe	ects, both acute and delayed
Symptoms/effects after inhalation Symptoms/effects after skin contact Symptoms/effects after eye contact Symptoms/effects after ingestion	 May cause respiratory irritation. Burns. Serious damage to eyes. Burns.

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

Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media	
Suitable extinguishing media	: Water spray. Dry powder. Foam. Carbon dioxide.
5.2. Special hazards arising from the substa	ance or mixture
Reactivity in case of fire Hazardous decomposition products in case of fire	: Corrosive vapours. : Toxic fumes may be released.
5.3. Advice for firefighters	
Protection during firefighting	: Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

SECTION 6: Accidental release measures			
6.1. Personal precautions, protective equipment and emergency procedures			
6.1.1. For non-emergency personnel Emergency procedures	: Ventilate spillage area. Avoid contact with skin and eyes. Do not breathe vapours, spray.		
6.1.2. For emergency responders Protective equipment	: Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".		
6.2. Environmental precautions			
Avoid release to the environment.			
6.3. Methods and material for containment	t and cleaning up		
Methods for cleaning up	: Take up liquid spill into absorbent material.		

0 1	Dispose of materials or solid residues at an authorised site.
6.4. Reference to other sections	

For further information refer to section 13.

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SECTION 7: Handling and storage	
7.1. Precautions for safe handling	
Precautions for safe handling Hygiene measures	 Use only outdoors or in a well-ventilated area. Avoid contact with skin and eyes. Do not breathe vapours, spray. Wear personal protective equipment. Wash contaminated clothing before reuse. Do not eat, drink or smoke when using this product. Always wash hands after handling the product.
7.2. Conditions for safe storage, inclue	ding any incompatibilities
Storage conditions	: Store in corrosive resistant container with a resistant inner liner. Keep only in original container. Store locked up. Store in a well-ventilated place. Keep container tightly closed. Keep cool.
Incompatible materials	: Metals.
7.3. Specific end use(s)	
No additional information available	
SECTION 8: Exposure controls/pe	rsonal protection
8.1. Control parameters	
8.1.1 National occupational exposure and b	piological limit values
No additional information available	
8.1.2. Recommended monitoring procedure	€S
No additional information available	
8.1.3. Air contaminants formed No additional information available	
8.1.4. DNEL and PNEC	
Knockout Spirits of Salts (7647-01-0)	
DNEL/DMEL (Workers)	
Acute - local effects, inhalation	15 mg/m³
Long-term - local effects, inhalation	8 mg/m ³
DNEL/DMEL (General population)	
Acute - local effects, inhalation	15 mg/m³
Long-term - local effects, inhalation	8 mg/m³
8.1.5. Control banding	
No additional information available	
8.2. Exposure controls	
8.2.1. Appropriate engineering controls	
Appropriate engineering controls: Ensure good ventilation of the work station.	
8.2.2. Personal protection equipment	

8.2.2. Personal protection equipment

Personal protective equipment:

Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

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Personal protective equipment symbol(s):



8.2.2.1. Eye and face protection

Eye protection:

Safety glasses

8.2.2.2. Skin protection

Skin and body protection: Corrosive chemical-resistant protective suit

Hand protection:

Wear protective gloves

Hand protection					
Туре	Material	Permeation	Thickness (mm)	Penetration	Standard
Repeated or prolonged exposure, In case of contact through splashing	Nitrile rubber (NBR)	6 (> 480 minutes)	0.35		
In case of contact through splashing, Repeated or prolonged exposure	Butyl rubber, Polyvinylchloride (PVC)	6 (> 480 minutes)	0.5		

Other skin protection

Materials for protective clothing:

Wear protective clothing

8.2.2.3. Respiratory protection

Respiratory protection:

In case of insufficient ventilation, wear suitable respiratory equipment

Respiratory protection			
Device	Filter type	Condition	Standard
Disposable half mask, Full face mask	Type B - Inorganic gases (hydrogen sulfide, chlorine, hydrogen cyanide), Type P2	Mist formation, Moist condition, Vapour protection	

8.2.2.4. Thermal hazards

No additional information available

8.2.3. Environmental exposure controls

Environmental exposure controls:

Avoid release to the environment.

SECTION 9: Physical and chemical properties		
9.1. Information on basic phy	ysical and chemical properties	
Physical state	: Liquid	
Colour	: light yellow.	
Odour	: characteristic.	
Odour threshold	: Not available	
Melting point	: -114.22 °C Remarks on result: 'other:'	

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Freezing point	: Not available
Boiling point	: 90 °C
Flammability	: Not applicable
Lower explosion limit	: Not available
Upper explosion limit	: Not available
Flash point	: Not available
Auto-ignition temperature	: Not available
Decomposition temperature	: Not available
рН	: Not available
Viscosity, kinematic	: Not available
Viscosity, dynamic	: 1.74 mPa·s @ 20 oC
Solubility	: Miscible.
Partition coefficient n-octanol/water (Log Kow)	: Not available
Vapour pressure	: 21.8 hPa @ 20 oC
Vapour pressure at 50°C	: Not available
Density	: Not available
Relative density	: 1.15 – 1.17
Relative vapour density at 20°C	: Not available
Particle characteristics	: Not applicable

9.2. Other information

9.2.1. Information with regard to physical hazard classes

No additional information available

9.2.2. Other safety characteristics

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

None under recommended storage and handling conditions (see section 7).

10.5. Incompatible materials

metals. Oxidizing agent. Strong acids. Strong bases.

10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: Toxicological information

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

Acute toxicity (oral)	: Not classified
Acute toxicity (dermal)	: Not classified
Acute toxicity (inhalation)	: Not classified
Skin corrosion/irritation	: Causes skin irritation.
Serious eye damage/irritation	: Causes serious eye irritation.
Respiratory or skin sensitisation	: Not classified

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Germ cell mutagenicity	: Not classified	
Carcinogenicity	: Not classified	
Reproductive toxicity	: Not classified	
STOT-single exposure	: Not classified	
hydrochloric acid %		
STOT-single exposure	May cause respiratory irritation.	
STOT-repeated exposure	: Not classified	
Aspiration hazard	: Not classified	

11.2. Information on other hazards

No additional information available

SECTION 12: Ecological information	
12.1. Toxicity	
Ecology - general Hazardous to the aquatic environment, short–term (acute) Hazardous to the aquatic environment, long–term (chronic) Not rapidly degradable	 Before neutralisation, the product may represent a danger to aquatic organisms. Not classified Not classified
12.2. Persistence and degradability	
No additional information available	
12.3. Bioaccumulative potential	
No additional information available	
12.4. Mobility in soil	
No additional information available	
12.5. Results of PBT and vPvB assessment	
No additional information available	
12.6. Endocrine disrupting properties	
No additional information available	
12.7. Other adverse effects	
No additional information available	
SECTION 13: Disposal considerations	

13.1. Waste treatment methods

Waste treatment methods

: Dispose of contents/container in accordance with licensed collector's sorting instructions.

SECTION 14: Transport information				
In accordance with ADR / IMDG / IATA / ADN / RID				
ADR	IMDG	ΙΑΤΑ	ADN	RID
14.1. UN number or ID number				
UN 1789	UN 1789	UN 1789	UN 1789	UN 1789

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ADR	IMDG	ΙΑΤΑ	ADN	RID
14.2. UN proper shipping	name			
HYDROCHLORIC ACID	HYDROCHLORIC ACID	Hydrochloric acid	HYDROCHLORIC ACID	HYDROCHLORIC ACID
Transport document descrip	otion			
UN 1789 HYDROCHLORIC ACID, 8, III, (E)	UN 1789 HYDROCHLORIC ACID, 8, III	UN 1789 Hydrochloric acid, 8, III	UN 1789 HYDROCHLORIC ACID, 8, III	UN 1789 HYDROCHLORIC ACID, 8, III
14.3. Transport hazard cl	ass(es)			
8	8	8	8	8
8	8	B	8	No and a state of the state of
14.4. Packing group				
III	III	III	III	III
14.5. Environmental haza	ards			
Dangerous for the environment: No	Dangerous for the environment: No Marine pollutant: No	Dangerous for the environment: No	Dangerous for the environment: No	Dangerous for the environment: No
No supplementary information	available			
4.6. Special precautions				
Classification code (ADR) special provisions (ADR) imited quantities (ADR) excepted quantities (ADR) eacking instructions (ADR) flixed packing provisions (ADR) flixed packing provisions (ADR) fortable tank and bulk contained ortable tank and bulk contained aDR) fank code (ADR) fank special provisions (ADR) fehicle for tank carriage fransport category (ADR) special provisions for carriage lazard identification number (H Drange plates	R) : Mi er instructions (ADR) : T4 er special provisions : TF : L4 : TL : AT : 3 - Packages (ADR) : V1	20 1 001, IBC03, LP01, R001 P19 4 P1 BN J42 T		
unnel restriction code (ADR) AC code	: E : 2F	3		
iransport by sea Special provisions (IMDG) imited quantities (IMDG) Excepted quantities (IMDG) Packing instructions (IMDG) BC packing instructions (IMDG) Fank instructions (IMDG)		L I 001, LP01 C03		

EmS-No. (Fire)

EmS-No. (Spillage)

Tank special provisions (IMDG)

: TP1

: F-A

: S-B

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Stowage category (IMDG)	: C
Segregation (IMDG)	: SGG1A, SG36, SG49
Properties and observations (IMDG)	: Colourless liquid.An aqueous solution of the gas hydrogen chloride. Highly corrosive to most metals. Causes burns to skin, eyes and mucous membranes.
Air transport	
PCA Excepted quantities (IATA)	: E1
PCA Limited quantities (IATA)	: Y841
PCA limited quantity max net quantity (IATA)	: 1L
PCA packing instructions (IATA)	: 852
PCA max net quantity (IATA)	: 5L
CAO packing instructions (IATA)	: 856
CAO max net quantity (IATA)	: 60L
Special provisions (IATA)	: A3, A803
ERG code (IATA)	: 8L
Inland waterway transport	
Classification code (ADN)	: C1
Special provisions (ADN)	: 520
Limited quantities (ADN)	: 5L
Excepted quantities (ADN)	: E1
Carriage permitted (ADN)	: T
Equipment required (ADN)	: PP, EP
Number of blue cones/lights (ADN)	: 0
Rail transport	
Classification code (RID)	: C1
Special provisions (RID)	: 520
Limited quantities (RID)	: 5L
Excepted quantities (RID)	: E1
Packing instructions (RID)	: P001, IBC03, LP01, R001
Mixed packing provisions (RID)	: MP19
Portable tank and bulk container instructions (RID)	: T4
Portable tank and bulk container special provisions	: TP1
(RID)	
Tank codes for RID tanks (RID)	: L4BN
Special provisions for RID tanks (RID)	: TU42
Transport category (RID)	: 3
Special provisions for carriage – Packages (RID)	: W12
Colis express (express parcels) (RID)	: CE8
Hazard identification number (RID)	: 80

14.7. Maritime transport in bulk according to IMO instruments

Not applicable

SECTION 15: Regulatory information

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

15.1.1. EU-Regulations

REACH Annex XVII (Restriction List)

Contains no substance(s) listed on REACH Annex XVII (Restriction Conditions)

REACH Annex XIV (Authorisation List)

Contains no substance(s) listed on REACH Annex XIV (Authorisation List)

REACH Candidate List (SVHC)

Contains no substance(s) listed on the REACH Candidate List

PIC Regulation (Prior Informed Consent)

Contains no substance(s) listed on the PIC list (Regulation EU 649/2012 concerning the export and import of hazardous chemicals)

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POP Regulation (Persistent Organic Pollutants)

Contains no substance(s) listed on the POP list (Regulation EU 2019/1021 on persistent organic pollutants)

Ozone Regulation (1005/2009)

Contains no substance(s) listed on the Ozone Depletion list (Regulation EU 1005/2009 on substances that deplete the ozone layer)

Explosives Precursors Regulation (2019/1148)

Contains no substance(s) listed on the Explosives Precursors list (Regulation EU 2019/1148 on the marketing and use of explosives precursors)

Drug Precursors Regulation (273/2004)

Contains no substance(s) listed on the Drug Precursors list (Regulation EC 273/2004 on the manufacture and the placing on market of certain substances used in the illicit manufacture of narcotic drugs and psychotropic substances)

15.1.2. National regulations

No additional information available

15.2. Chemical safety assessment

No chemical safety assessment has been carried out

SECTION 16: Other information

Indication of changes:

New format.

Indication of changes

Section	Changed item	Change	Comments
1.3	Additional information	Added	Barrettine (Europe) Ltd

Abbreviations a	nd acronyms:
ADN	European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road
ATE	Acute Toxicity Estimate
BLV	Biological limit value
CAS-No.	Chemical Abstract Service number
CLP	Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008
DMEL	Derived Minimal Effect level
DNEL	Derived-No Effect Level
EC50	Median effective concentration
EC-No.	European Community number
EN	European Standard
ΙΑΤΑ	International Air Transport Association
IMDG	International Maritime Dangerous Goods
LC50	Median lethal concentration
LD50	Median lethal dose
LOAEL	Lowest Observed Adverse Effect Level
NOAEC	No-Observed Adverse Effect Concentration
NOAEL	No-Observed Adverse Effect Level
NOEC	No-Observed Effect Concentration

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Abbreviations and acronyms:	
OEL	Occupational Exposure Limit
РВТ	Persistent Bioaccumulative Toxic
PNEC	Predicted No-Effect Concentration
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (EC) No 1907/2006
RID	Regulations concerning the International Carriage of Dangerous Goods by Rail
SDS	Safety Data Sheet
vPvB	Very Persistent and Very Bioaccumulative
WGK	Water Hazard Class

Full text of H- and EUH-statements:

Eye Irrit. 2	Serious eye damage/eye irritation, Category 2
H290	May be corrosive to metals.
H314	Causes severe skin burns and eye damage.
H315	Causes skin irritation.
H319	Causes serious eye irritation.
H335	May cause respiratory irritation.
Skin Corr. 1B	Skin corrosion/irritation, Category 1, Sub-Category 1B
Skin Irrit. 2	Skin corrosion/irritation, Category 2
STOT SE 3	Specific target organ toxicity – Single exposure, Category 3, Respiratory tract irritation

The classification complies with

: ATP 12

Safety Data Sheet (SDS), EU

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.